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FREE JET ACOUSTIC INVESTIGATION OF HIGH-RADIUS-RATIO COANNULAR PLUG NOZZLES

Contract NAS3-20619

Comprehensive Data Report

VOLUME I

By

P.G. Vogt
P.K. Bhutiani
P.R. Knott

January 1981



Prepared for
National Aeronautics and Space Administration
Lewis Research Center
21000 Brookpark Road
Cleveland, Ohio 44135

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16. Abstract <p>This report is a companion document to the Contractor Final Report issued under this contract. The report describes the acoustic test models, the test facility, and the data acquisition/reduction procedures. A detailed definition of all test points is listed in tabular form. Results of both the acoustic and laser velocimeter tests are presented in a reduced data format following the standard practice of General Electric's Jet Noise Technology Section.</p> <p>Discussions and interpretations of the test results are contained in the Final Report. In all, six coannular plug nozzle configurations, having inverted velocity and temperature profiles, and a baseline convergent conical nozzle were tested for simulated flight acoustic evaluation in General Electric's Anechoic Free-Jet Acoustic Facility. The nozzles were tested over a range of test conditions that are typical of a Variable Cycle Engine for application to advanced high speed aircraft. The outer stream radius ratio for most of the configurations was 0.853, and the inner-stream-outer-stream area ratio was tested in the range of 0.2 to 0.54. Other variables investigated were the influence of bypass struts, a simple noncontoured convergent-divergent outer stream nozzle for forward quadrant shock noise control, and the effects of varying outer stream radius and inner-stream-to-outer-stream velocity ratios on the flight noise signatures of the nozzles. It was found that in simulated flight, the high-radius-ratio coannular plug nozzles maintain their jet noise and shock noise reduction features previously observed in static testing. The presence of nozzle bypass struts will not significantly effect the acoustic noise reduction features of a General Electric-type nozzle design. A unique coannular plug nozzle flight acoustic spectral prediction method was identified and found to predict the measured results quite well. Special laser velocimeter and acoustic measurements were performed which have given new insight into the jet and shock noise reduction mechanisms of coannular plug nozzles with regard to identifying further beneficial research efforts.</p>					
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1.0 INTRODUCTION

This Comprehensive Data Report includes the basic test description and test results which are analyzed and documented in the Final Report.

2.0 DESCRIPTION OF ACOUSTIC MODELS

Seven nozzle configurations (six coannular plug and one circular conic nozzle) were selected and tested in this program. The nozzle selections and design details are discussed in a Design Report (Reference 1). The coannular plug nozzles selected were generic to General Electric's exhaust nozzle concepts for application to Advanced Supersonic Technology Variable Cycle Engine (AST/VCE). These AST/VCE nozzles are generally of a high outerstream radius ratio design with coannular (noncoplanar) flows and on a plug nozzle arrangement. The flows are of an inverted velocity and temperature nature.

Drawings of nozzle arrangements for Models 1, 2, 3 and 4 are shown in Figure 1. As shown, this figure shows Model 1. This model had the inner nozzle lip with a non-contoured, convergent-divergent (C-D) termination. Note 4 on Figure 1 defines throat to exit areas for this configuration. This design was not actually desired but inadvertently fabricated when the manufacturer used a boring process to terminate the inner nozzle rather than facing the inner nozzle outer shroud so that a simple convergent termination could be obtained. This C-D termination was only noticed when post test geometry measurements were being taken. As can be noted from the insert note 4 on Figure 1, the C-D area expansion of $A_e^i/A_t^i = 1.21$ occurred within a length of only 0.118 inches and was not at first detected in the hardware checkout. This model was tested and the data is contained herein, but this C-D inner stream lip was reworked to have an inner stream convergent termination and was designated as Model 1A. All of the other models were also tested with this inner stream conic termination. Model 1A then was a near similitude coannular plug nozzle to a YJ101 engine test nozzle which was tested under NASA3-20582 (See CR-159869). Other detailed nozzle dimensions for these models and the others are contained in Table I. Of particular note for Model 1A (and 1) is the existence of eight

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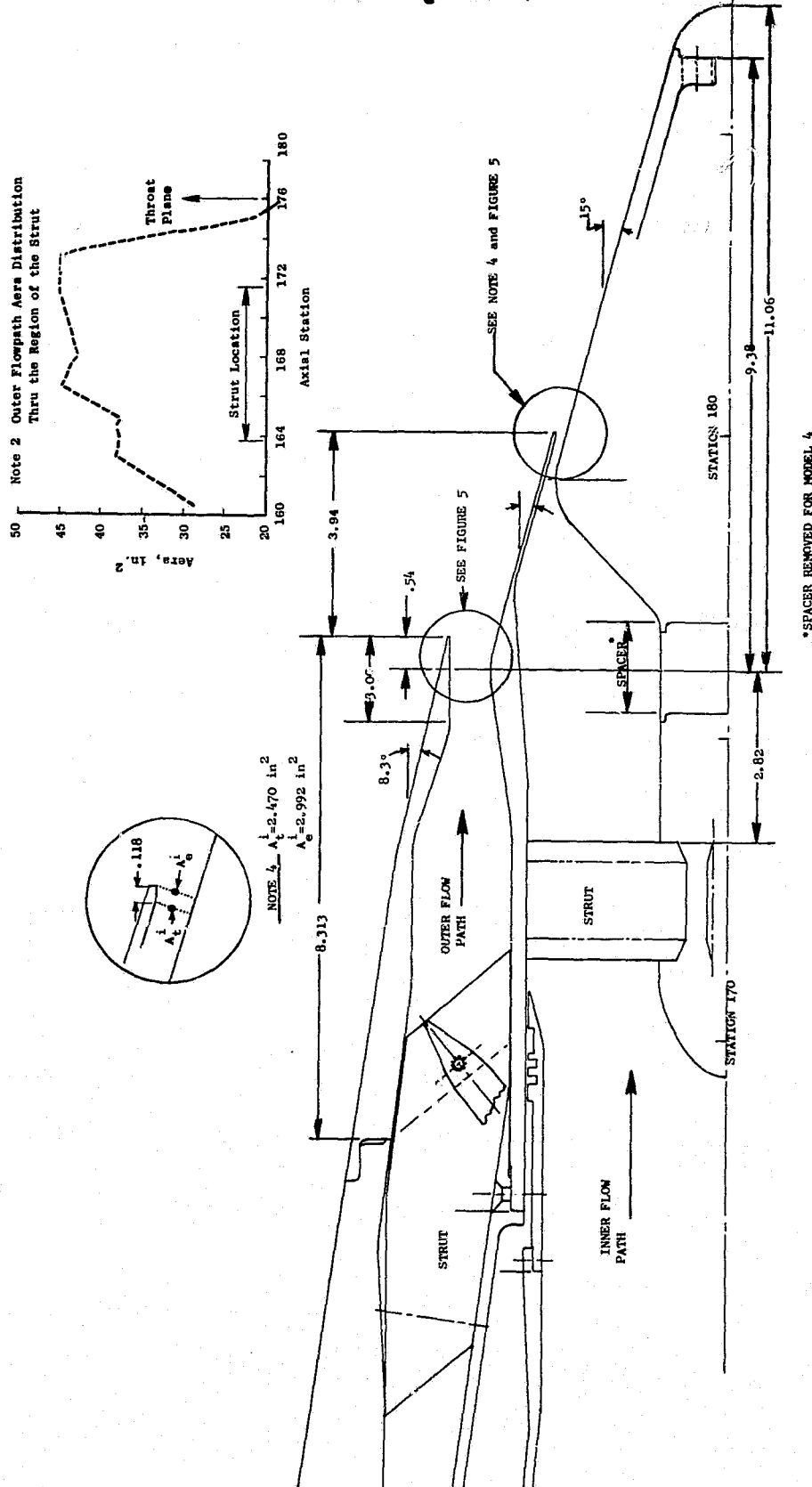


Figure 1. Details of Models 1, 2, 3 and 4 Assemblies.

struts. These struts were designed as near similitude designs to the YJ101 engine design, as noted above, and are used in engine application to pass the outer fan duct flow into the inner nozzle. Since the General Electric Anechoic Free-Jet Acoustic Test Facility contains independent temperature and pressure of each stream, it was not necessary to physically invert the flow. Thus the nozzle flow conditions and flow distributions around the outer struts were simulated in these model scale experiments, but the duct flow through the struts was not attempted or considered important to these acoustic simulations. The area distribution through the region of the strut is shown in the upper right hand corner of Figure 1. Any other design details should be obtained from Reference 1.

Model 2 was obtained by simply removing the struts; thus, by comparing Models 1A and 2 a determination of the influence of struts on the nozzle exhaust noise radiation can be made. Model 3 was similar to Model 2 in terms of outer flow radius ratio and inner to outer nozzle area ratio ($R_r^o \sim .85$ and $A_r^i \sim .2$ -- See Table I) and without struts. But now the outer stream nozzle was configured to be a convergent termination rather than the C-D terminations of Models 1, 1A and 2. This termination was obtained by the removal of a .554 inch spacer located in the outer flow hardware at axial station ~ 150 (See Figure 2 for the location of this space piece). Thus, by comparing Models 2 and 3, the effect of outer stream terminations can be evaluated.

Model 4 was obtained by removing the 1.480 inch spacer from the inner plug identified in Figure 1. Figure 2 shows the assembly drawing of Model 4. This drawing also shows the location of the tertiary nozzle and the locations of nozzles and tertiary charging stations (designated by axial station numbers). Thus by comparing Models 4 and 3, an acoustic evaluation of the influence of

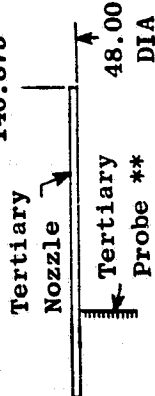
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Note 1

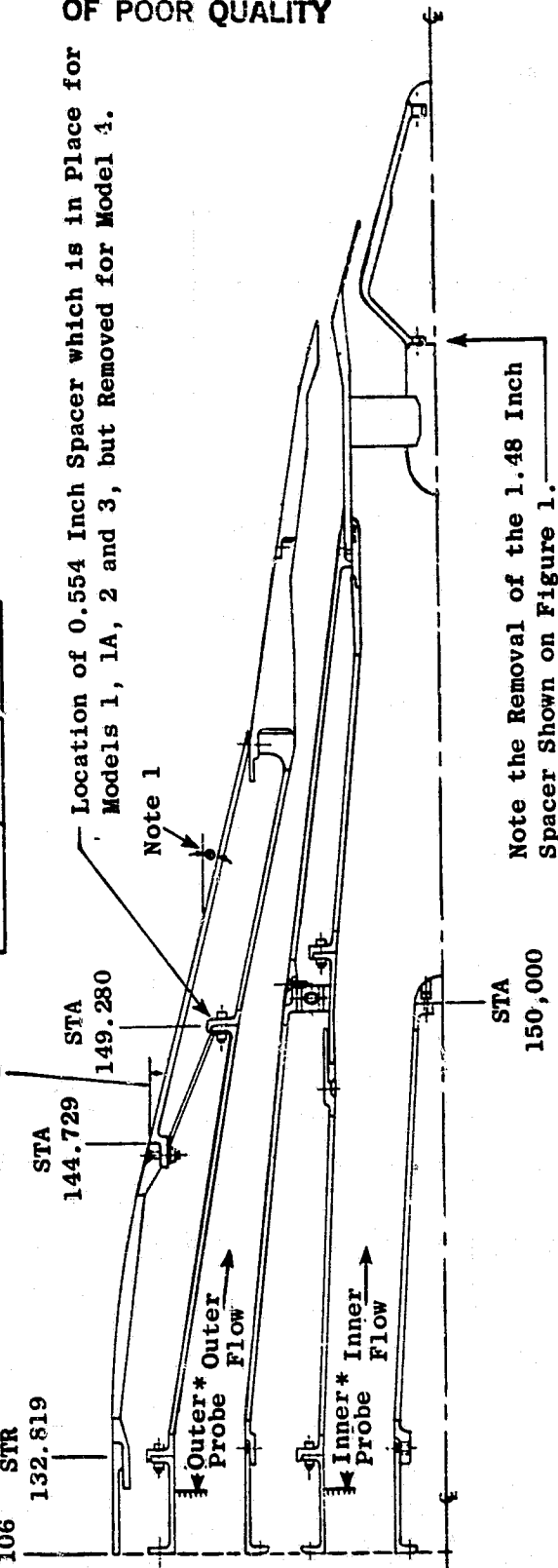
Slope of Outer Ducting

STA	DIA	θ
144.729	22.60	14.3
160.401	14.60	1
172.461	10.895	8.7
176.034	9.226	13.1

STA
140.875



STR 129.106 STR 132.819
Tertiary Flow →
22.60 DIA



Remarks:

- * 2 Probes 180° Apart (Each Having 3 P_t and 3 T_t Elements)
- ** 1 Probe (Having 6 P_t and 6 T_t Elements)

Figure 2. Details of Model 4 Assembly.

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inner stream area ratio from 0.526 to 0.194, for the same outer and inner nozzle terminations and the same outer nozzle radius ratio ($R_r^0 \sim .85$), can be made.

Model 5 was the baseline circular convergent conical nozzle. Figure 3 and Table I define the important geometric parameters for this model.

The coannular plug nozzles 6 and 7 designs are shown in Figure 4. These nozzles were previously tested statically under contract NAS3-19777 (NASA CR-3149). By comparing Models 6 and 4, the influence of outer nozzle radius ratio can be determined ($A_r^i \sim .52$ for both while Model 6 has $R_r^0 \sim .901$ and Model 4 has a $R_r^0 \sim .85$). Model 7 was similar to Model 1A but did not have struts or a similitude outer nozzle flow path to the YJ101 engine test nozzle mentioned earlier. The inner to outer nozzle area ratio, A_r^i , was also slightly larger ($A_r^i \sim 0.324$ vs 0.194 for Model 1A). Since this model was existing, testing was initiated on this model first; and much of the aerothermodynamic acoustic parametric testing described in Section 5.0 was performed on this nozzle.

Table I summarizes the detailed model dimensions. Note that the inner nozzle exit dimensions are only shown for Model 1, since all other models were with a convergent conic nozzle termination (i.e., with the same location for the throat and exit). Other details of the nozzle area calculations are contained in Figure 5. Note that the $\cos \theta$ is needed in the area calculations for the nozzles with a throat at an angle θ to the vertical.

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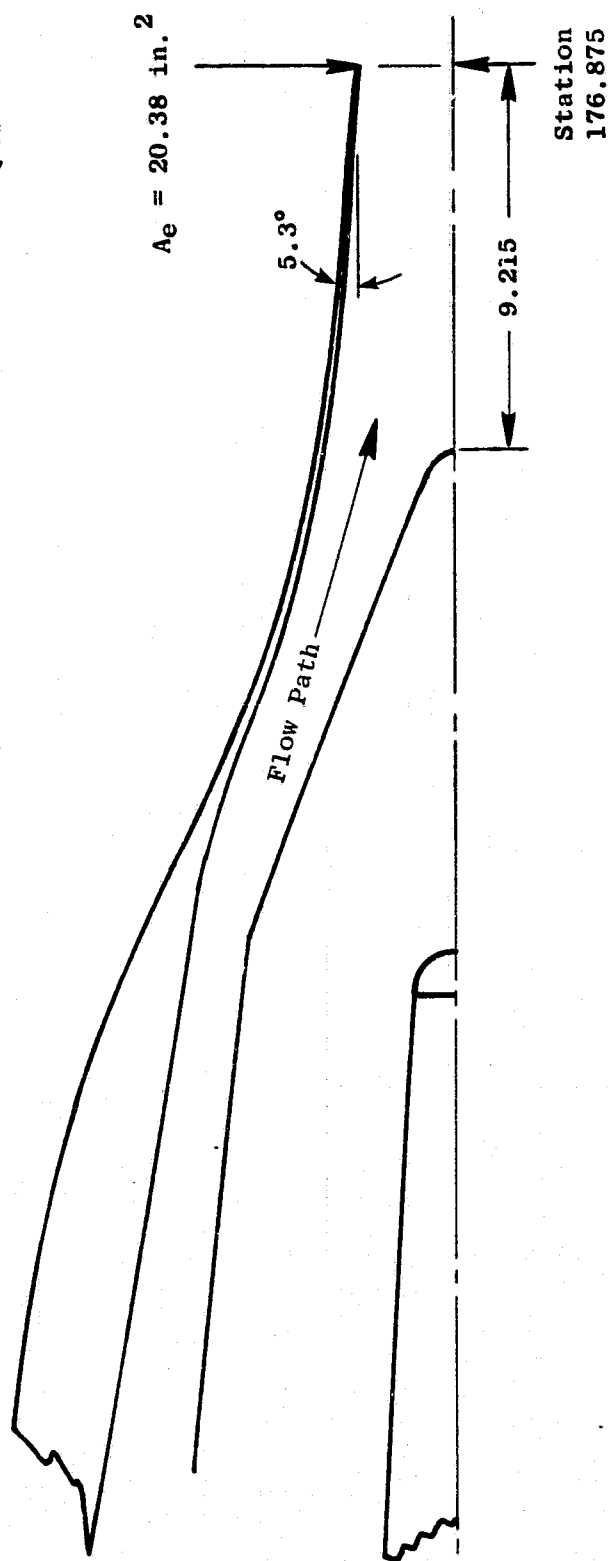
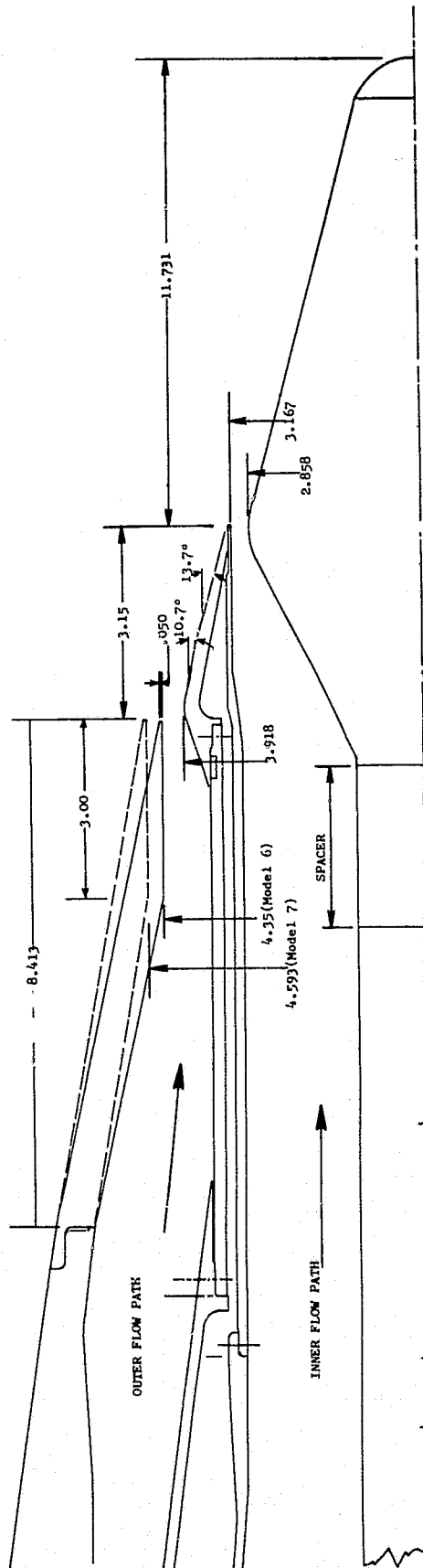


Figure 3. Details of Conic Model 5 Assembly.



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Figure 4. Details of Models 6 and 7.

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Table I. Detailed Dimensions of Model Nozzles.

Parameter	Symbol	Model							
		1	1A	2	3	4	5	6	7
Outer Throat Height	$-h_t^o$, inches	0.675	0.675	0.675	0.675	0.675	---	0.432	0.680
Inner Throat Height	h_t^i , inches	0.140	0.20	0.197	0.20	0.582	---	0.309	0.307
Outer Throat Area	A_t^o , in. ²	18.049	18.049	18.049	18.049	18.049	20.38	11.224	18.171
Inner Throat Area	A_t^i , in. ²	2.470	3.496	3.446	3.496	9.499	---	5.847	5.815
Throat Area Ratio,	A_t^i/A_t^o	0.137	0.194	0.191	0.194	0.526	---	0.521	0.324
Total Throat Area	A_t^T , in. ²	20.519	21.545	21.495	21.545	27.548	20.38	17.071	23.986
Equivalent Diameter Based on Throat Area	D_{eq_t} , inches	5.11	5.24	5.23	5.24	5.92	5.09	4.66	5.53
Outer Exit Height	h_e^o , inches	0.757	0.757	0.757	---	---	---	---	---
Inner Exit Height	h_e^i , inches	0.1705	---	---	---	---	---	---	---
Outer Exit Area	A_e^o , in. ²	20.060	20.060	20.060	---	---	---	---	---
Inner Exit Area	A_e^i , in. ²	2.992	---	---	---	---	---	---	---
Exit Area Ratio	A_e^i/A_e^o	0.149	---	---	---	---	---	---	---
Outer Exit/Throat Area Ratio	A_e^o/A_t^o	1.11	1.11	1.11	---	---	---	---	---
Total Exit Area	A_e^T , in. ²	23.052	---	---	---	---	---	---	---
Equivalent Diameter Based on Exit Area	D_{eq_e} , inches	5.42	---	---	---	---	---	---	---
Outer Hub Radius	R_1^o , inches	3.918	3.918	3.918	3.918	3.918	---	3.918	3.918
Outer Tip Radius	R_2^o , inches	4.593	4.593	4.593	4.593	4.593	2.547	4.350	4.593
Inner Hub Radius	R_1^i , inches	2.740	2.686	2.686	2.686	2.317	---	2.858	2.858
Inner Tip Radius	R_2^i , inches	2.875	2.879	2.879	2.879	2.879	---	3.167	3.167
Outer Radius Ratio	$R_r^o = (R_1^o/R_2^o)$	0.853	0.853	0.853	0.853	0.853	---	0.901	0.853
Inner Radius Ratio	$R_r^i = (R_1^i/R_2^i)$	0.953	0.933	0.933	0.933	0.805	---	0.902	0.902
Outer Exit Stagger	X^o , inches	3.466	3.346	3.346	3.900	3.900	---	3.176	3.150
Outer Stagger/Outer Throat Height	X^o/h_t^o	5.13	4.96	4.96	5.78	5.78	---	7.35	4.63
Shroud Angle	θ_s^1 , degrees	15°	15°	15°	15°	15°	---	11°	11°
Plug Angle	θ_s^2 , degrees	15°	15°	15°	15°	15°	---	15°	15°
Internal Struts		Yes	Yes	No	No	No	No	No	No
C-D or Convergent Outer		C-D	C-D	C-D	Conic	Conic	Conic	Conic	Conic
C-D or Convergent Inner		C-D	Conic	Conic	Conic	Conic	---	Conic	Conic

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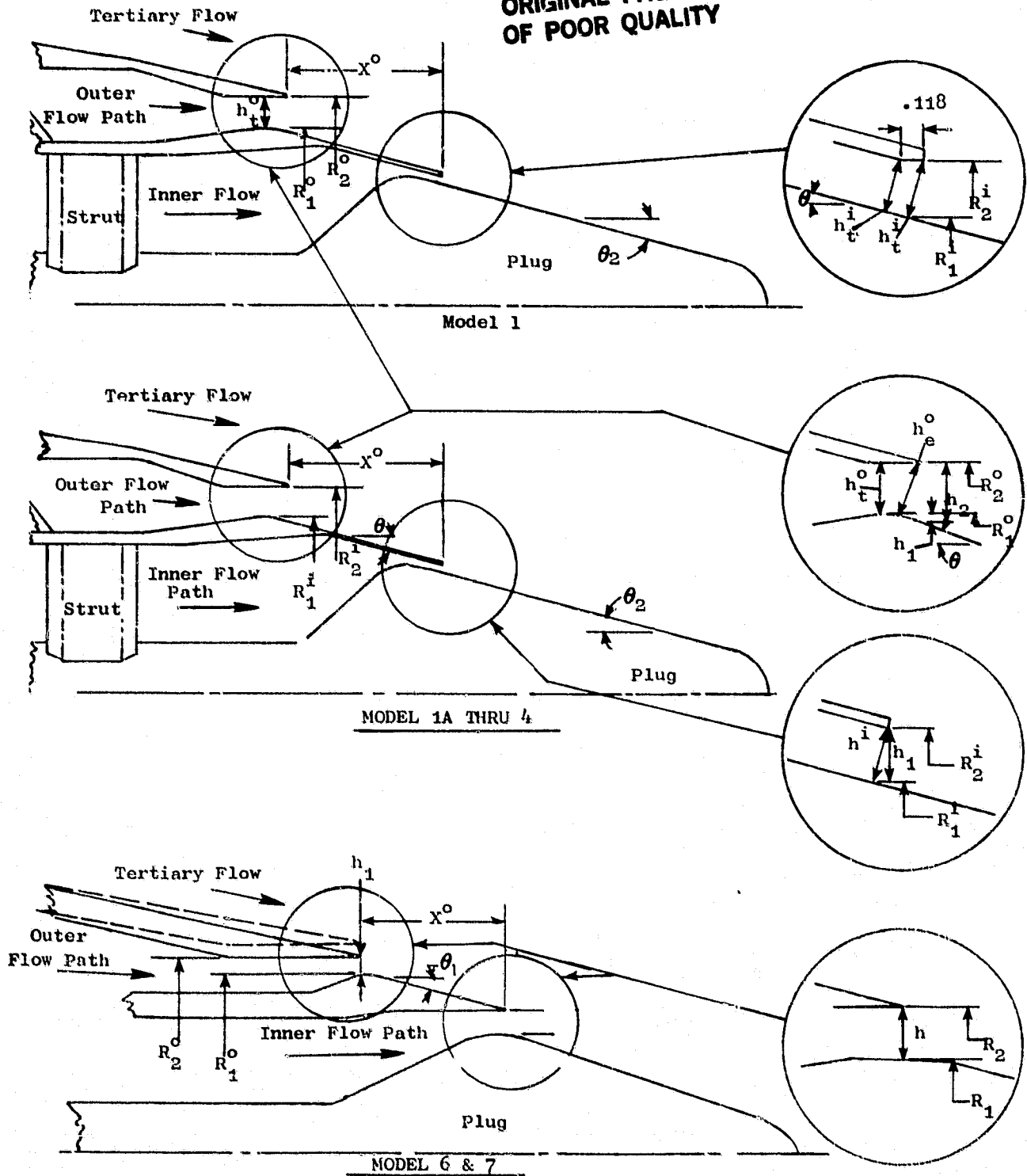


Figure 5. Details of Nozzle Exits.

3.0 DESCRIPTION OF TEST FACILITY

3.1 ACOUSTIC FACILITY DESCRIPTION

All acoustic testing was performed in the General Electric jet noise anechoic test facility located in Evendale, Ohio. This facility can accommodate model exhaust nozzle configurations ranging in size from a 0.08 in. to a 6.25 in. diameter model and has the capability to run both single and dual flow models. In addition, a 4 foot diameter tertiary duct surrounds the model nozzles with airflow which can be used to simulate forward flight.

A schematic of the jet noise anechoic facility showing the triaxial flow arrangement (i.e., fan, core, and tertiary flow) is presented in Figure 6. The fan and core airflows separate off from the main header and flow through individual orifice flow rate meters, combustors, silencers, and plenum chambers before entering the model nozzle. The dual flow arrangement is described in detail in Reference 2.

The tertiary air system consists of a 250,000 scfm (50 inches H₂O static pressure) fan and 3500 hp electric motor. Transition ductwork and silencer route the air from the fan discharge to the tertiary plenum chamber. The silencer reduces the noise level by 30-50 dB. Air supply to the fan is pulled through the existing buildup area inlet silencer. The tertiary plenum chamber (14 feet x 12 feet x 10 feet) is located just below the test deck. Three walls and the floor are covered with acoustic treatment (4 inch thick fiber glass pillows covered with fiber glass cloth and perforated plate). The co-annular plenum chamber remains, as before, in the new tertiary plenum chamber. Air enters the plenum flowing horizontally, then turns vertically, and enters a 6 feet long cylindrical test section which is 7 feet in diameter mounted on the top of the test deck. This cylindrical duct contains a flow straightening screen and honeycomb (10 inch length x 14 inch hexagonal cells) section. The duct then smoothly transitions to the 4 foot diameter tertiary discharge nozzle at the exit plane. This yields a free-jet-to-jet-nozzle area ratio of about 63 (based on 6-inch equivalent diameter nozzle). Maximum tertiary flow rate of about 310 lb/sec permits simulation of Mach numbers in excess of 0.30. Mach number variation is obtained by varying the fan inlet vanes (changing the tertiary airflow rate).

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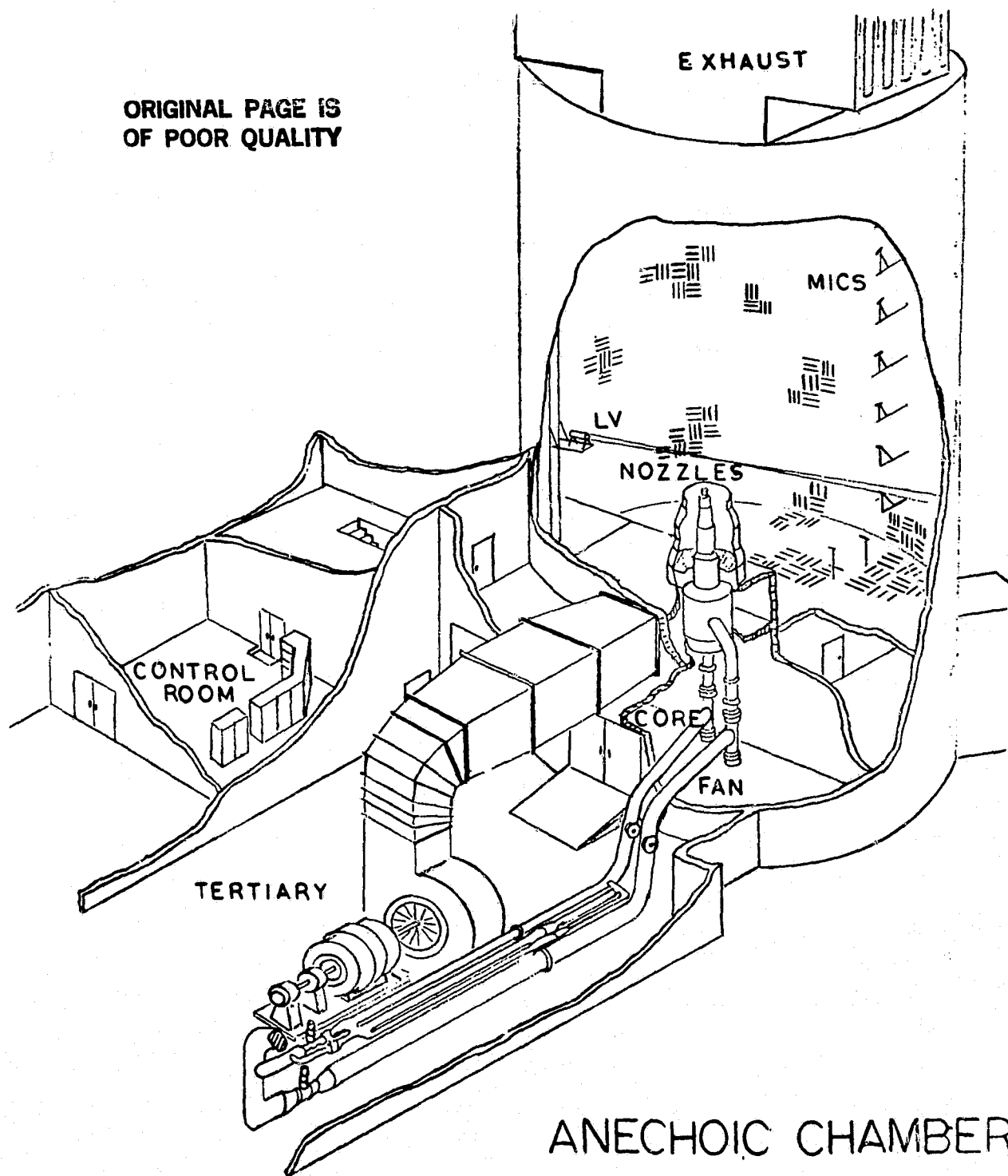


Figure 6. General Electric Anechoic Free Jet/Jet Noise Facility Schematic.

A Mach number of approximately 0.41 was obtained with the vanes fully open. Entrained flow from the outside passes through a silencer and enters the anechoic chamber through the acoustic wedges on the floor. The airflow exits through the "T" exhaust stack in the ceiling of the chamber directly over the nozzles. A schematic of the jet noise anechoic facility showing the tertiary flow arrangement and microphone locations is shown in Figure 7.

Visual observations of tufts located on the exhauster and ceiling mikes during maximum tertiary flow conditions indicated that no chamber recirculation existed. A windmeter at the 130° mike indicated velocities below 1 ft/sec.

The tertiary flow rate can be determined from either a total pressure rake or from static pressure taps located around the tertiary exhaust. The total pressure rake was removed during acoustic testing to avoid additional strut noise.

An overhead view of the tertiary with a conic nozzle installed is shown in Figure 8. Acoustic wedges surround the outside of the tertiary duct as well as on the walls, ceiling, and floor of the anechoic chamber. The walkway grating is removed prior to acoustic testing. The laser velocimeter (LV) shown in the far right of the figure is also removed during acoustic testing.

3.2 ACOUSTIC CHARACTERISTICS OF ANECHOIC CHAMBER

Both inverse square laws and background noise level tests were conducted at no cost to this NASA program to provide information on the acoustic characteristics of the anechoic chamber. The results of these tests are reported herein.

3.2.1 Inverse Square Law Tests

The inverse square law tests at the 90° microphone position are shown in Figure 9. Both tertiary and coannular nozzle hardware were in place for this static test. A speaker was used as the sound source for frequencies from

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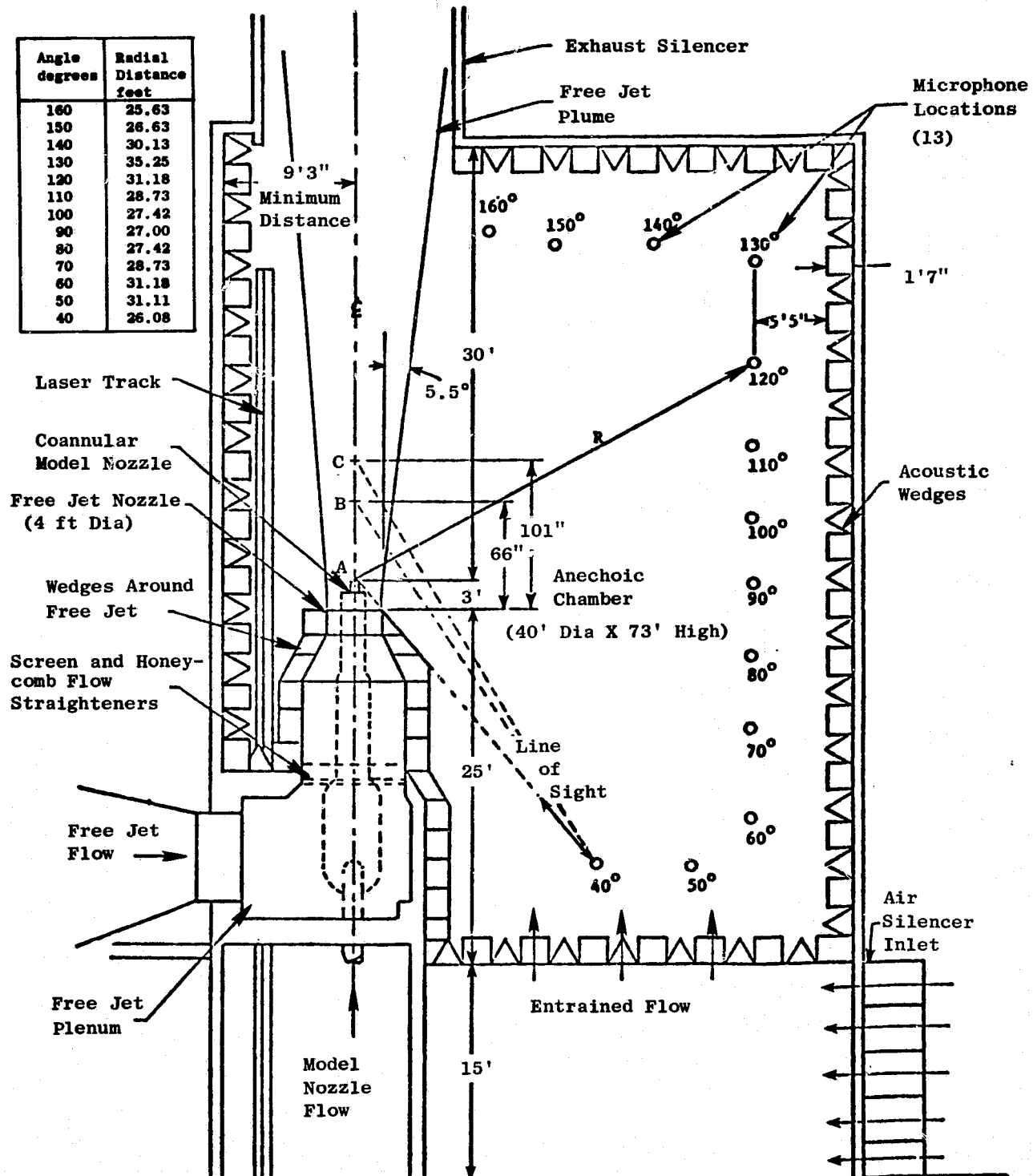


Figure 7. Free Jet Arrangement in Cell 41 Anechoic Facility.

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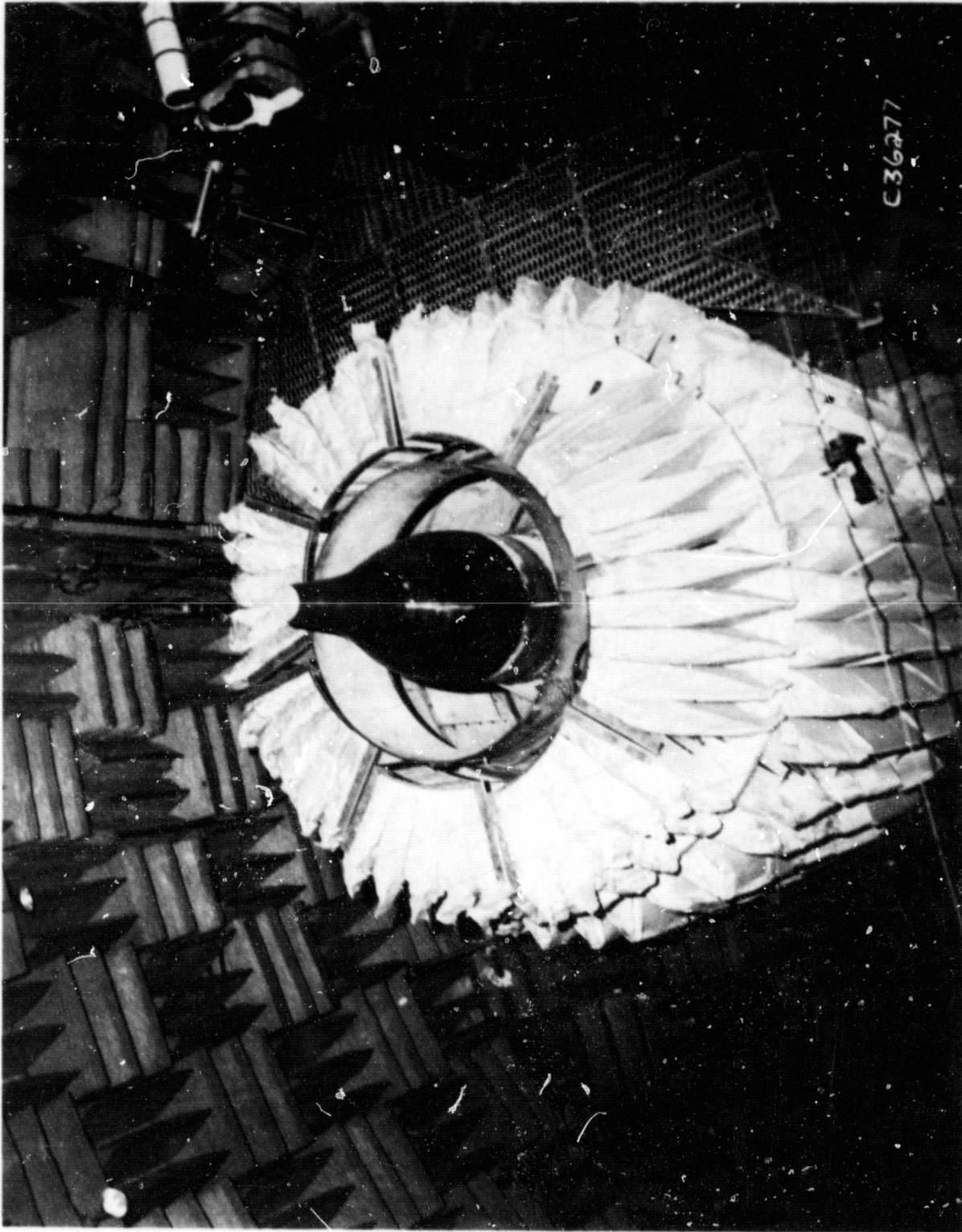


Figure 8. Overhead View of the Tertiary Flow Stream with a Conic Nozzle Installed.

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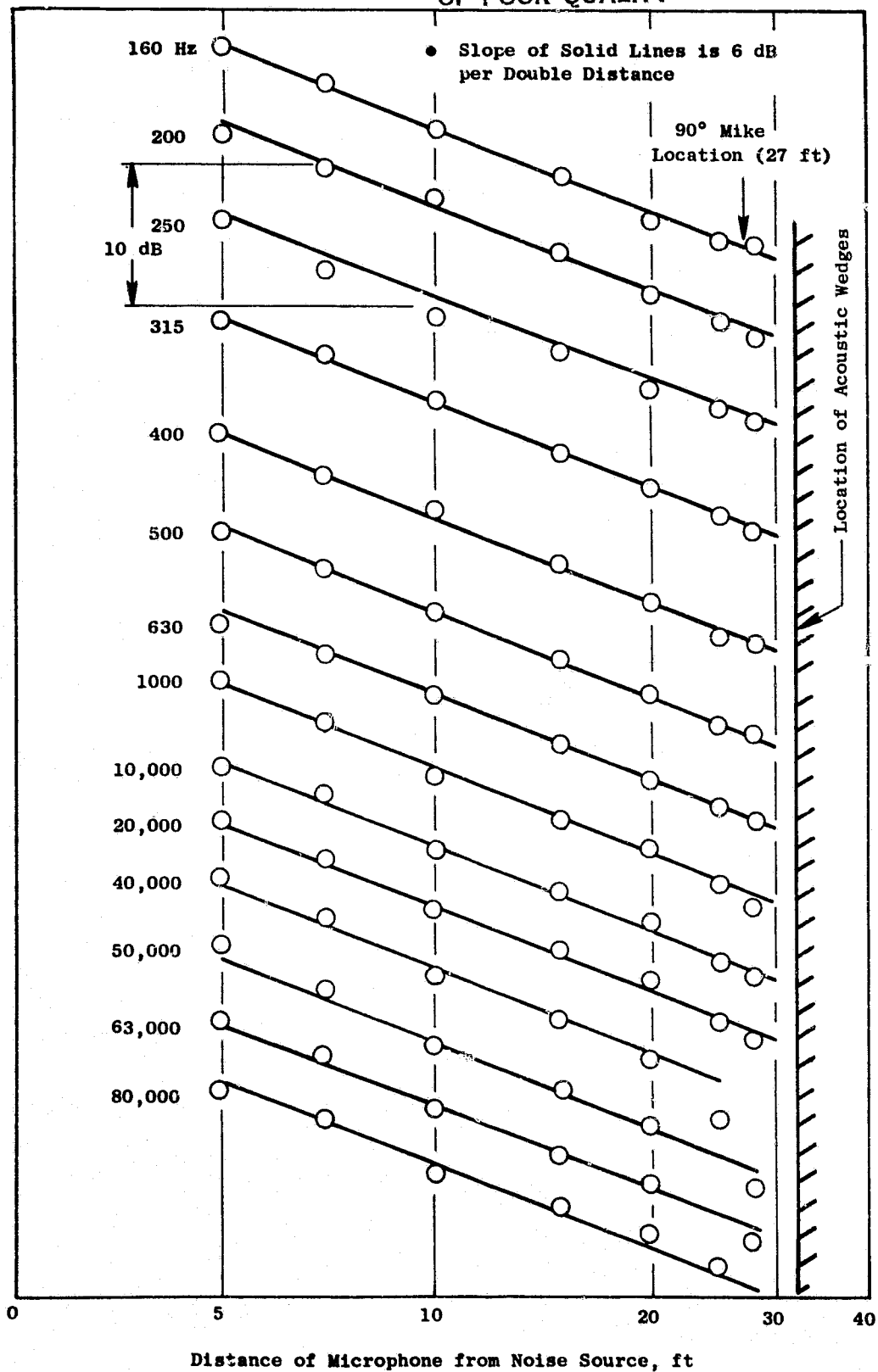


Figure 9. Inverse Square Law Test at 90° with Tertiary and Coannular Nozzle Hardware (Bass, Bauer and Evans Atmospheric Correction Included), Lossless for 160 Hz < f < 630 Hz, Used Speaker and for 1000 Hz < f < 80 kHz Used Air Ball.

160 Hz to 630 Hz, and an air ball was used for frequencies from 1000 Hz to 80 kHz. The details of the procedure are given in Reference 2. A microphone was traversed from a position of 5 feet from the noise source to a position near the far wall wedges. Data recorded at six to seven positions along the traverse are shown in Figure 9. The data follow the 6 dB reduction per doubling of distance trend quite well.

The standard deviation of the inverse square law tests for five angles is shown in Figure 10. The calculation for the standard deviation is derived and described in Reference 2. Two axial locations of the air ball sound source downstream of the tertiary (66 inches and 101 inches) were used in addition to the standard 36 inch distance in order to obtain the actual standard deviation for the 40° microphone. It was realized that the air ball located at Location A (see Figure 7) did not represent the source location of the lower and mid-frequencies. The "line-of-sight" for those frequencies, whose sources are located further downstream, would be less influenced by the wedges. The data for the two positions "B" and "C" (Figure 7) are shown in Figure 10. Very little difference in levels is found between the two positions. Comparison of this data with that at position "A" (i.e., 36 inches downstream of the tertiary) shows the interference caused by the wedges. Basically, the large fluctuations in the standard deviation have been replaced with a more realistic curve.

3.2.2 Background Noise

The effect of the tertiary flow on the background noise level is shown in Figures 11, 12, and 13 for the 50°, 90°, and 150° microphones, respectively. Only data above the facility design cutoff frequency of approximately 250 Hz are shown. Typical spectra for a coannular nozzle having a mixed velocity (v^M)* of 1066 ft/sec are shown with and without tertiary flow. The jet noise levels are considerably above the free jet background. Even in the worst case (i.e., $v^M = 1066$ fps with the tertiary Mach number (M_T) = 0.3 spectra versus $v^M = 0$ fps with $M_T = 0.3$ spectra), the jet noise is 10 dB above the tertiary flow background noise. Thus the tertiary flow is not expected to influence the jet noise levels or spectra for jet velocities of 1066 fps or more.

* See Section 5.0 for the definition of the mixed velocity v^M .

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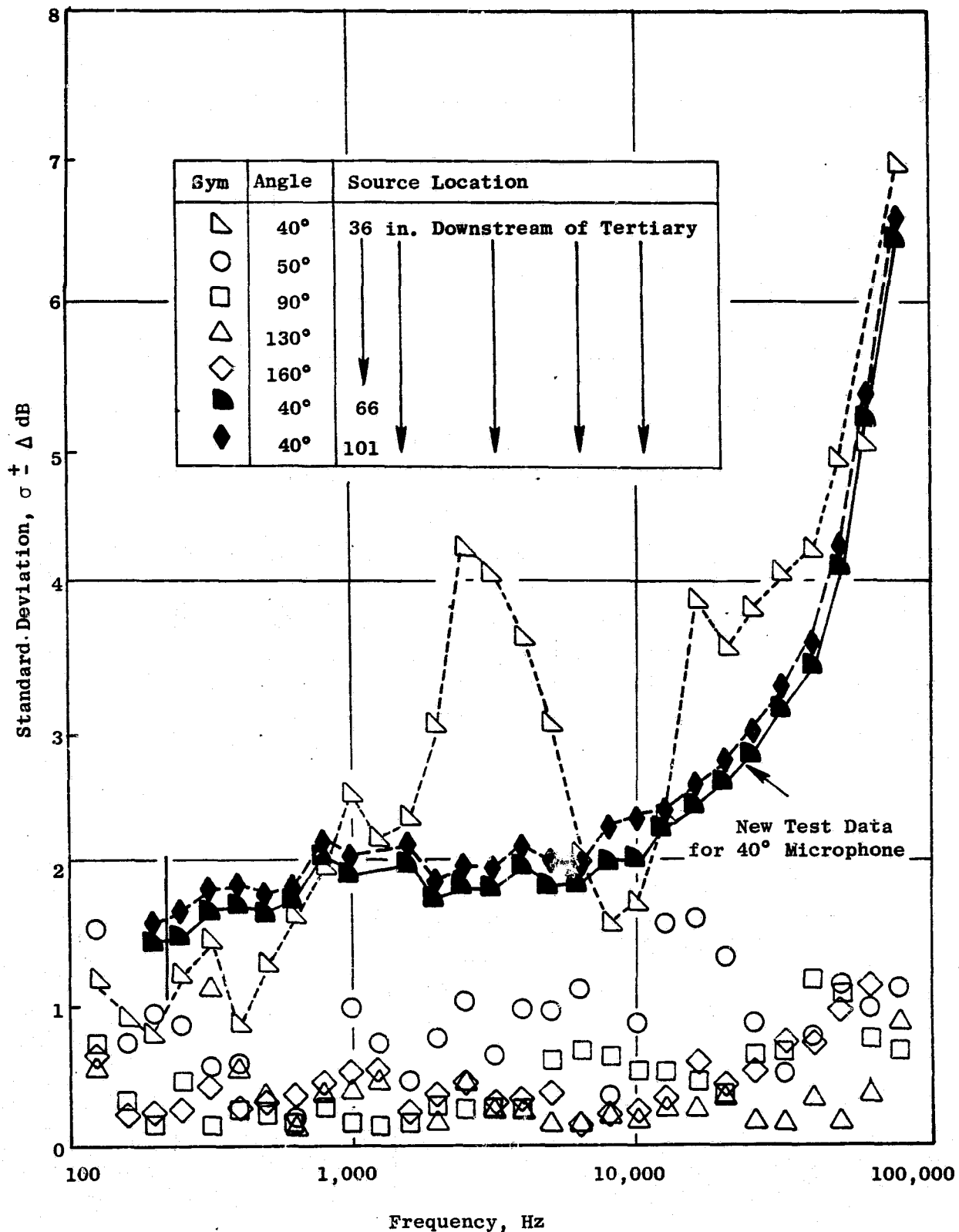


Figure 10. Standard Deviation of Inverse Square Law Tests with Tertiary and Coannular Nozzle Hardware.

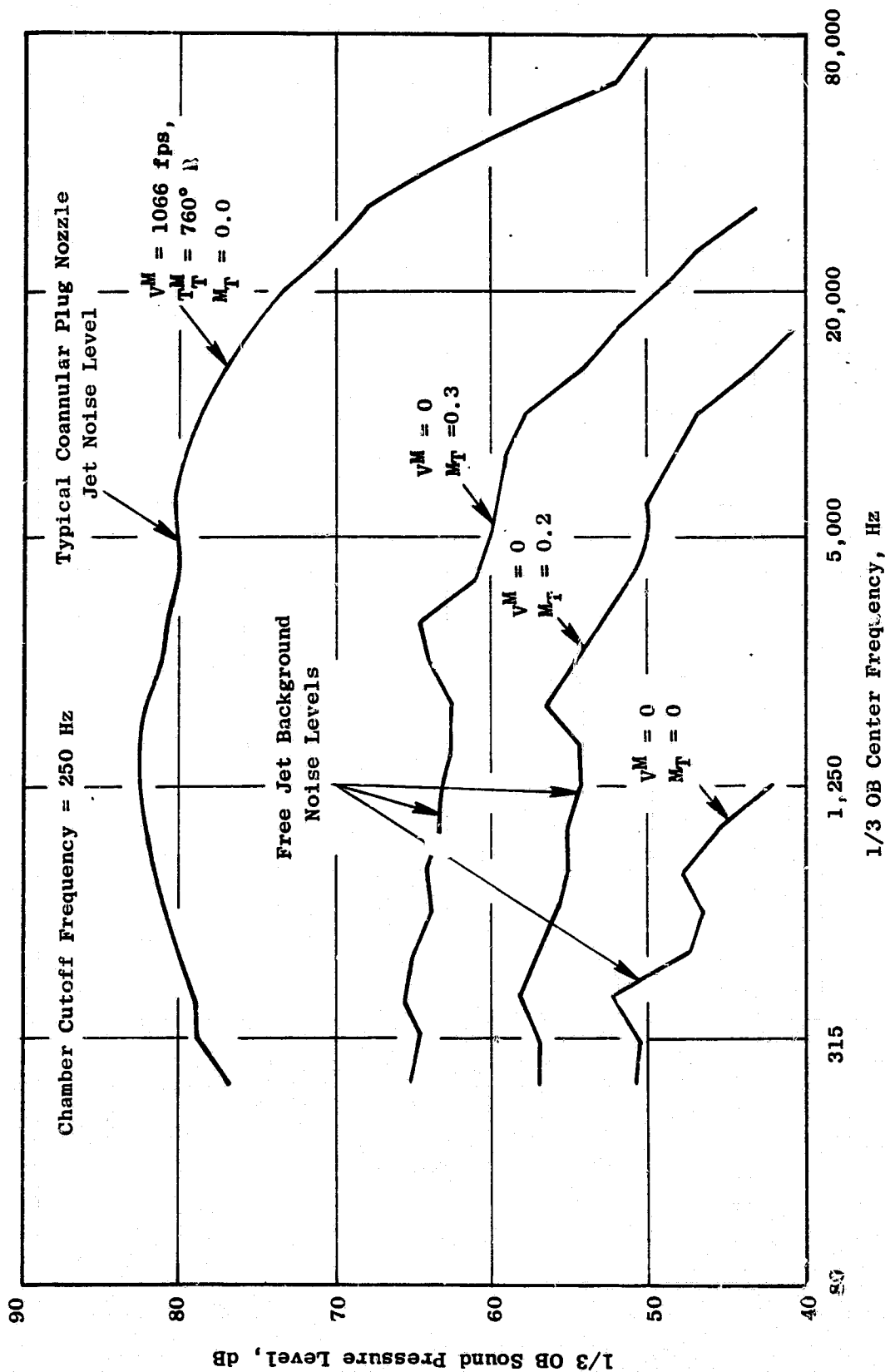


Figure 11. Comparison of Coannular Jet Noise Spectra with the Tertiary (Background) Noise Spectra $\theta_I = 50^\circ$, 40 Foot Arc Data.

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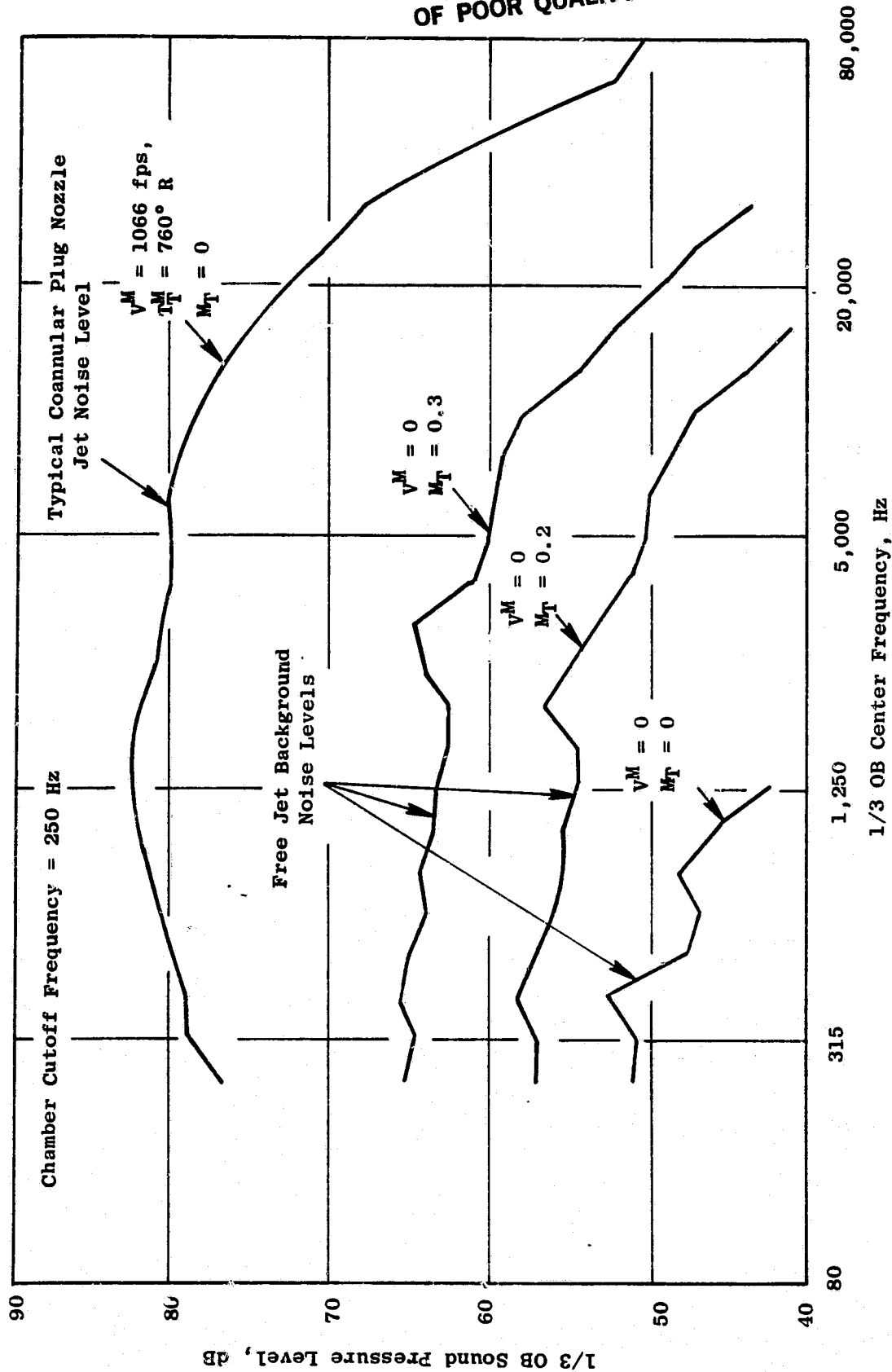


Figure 12. Comparison of Coannular Jet Noise Spectra with the Tertiary (Background) Noise Spectra $\theta_I = 90^\circ$, 40 Foot Arc Data.

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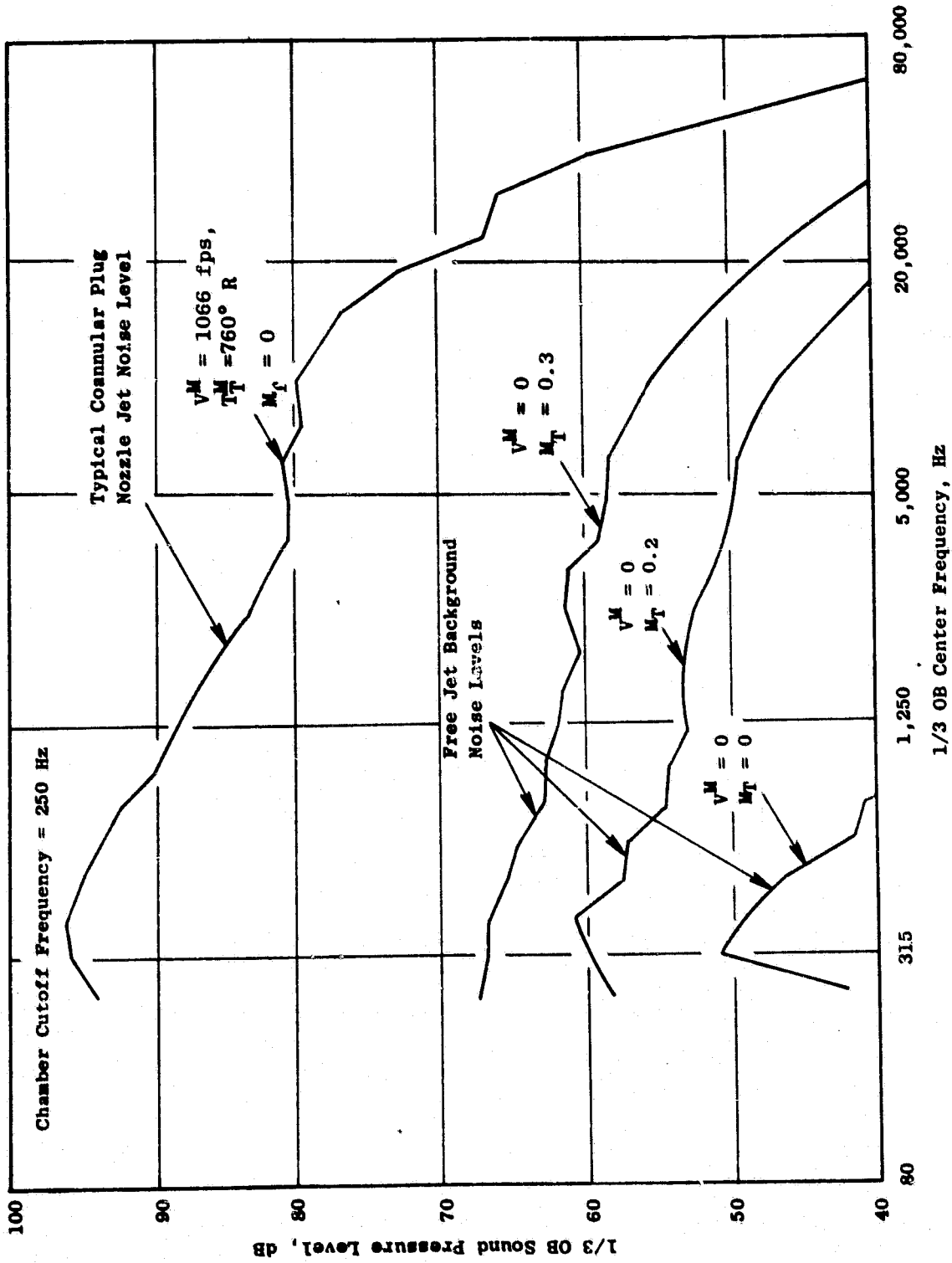


Figure 13. Comparison of Coannular Jet Noise Spectra with the Tertiary (Background) Noise Spectra $\theta_I = 150^\circ$, 40 Ft Arc Data.

3.3 DESCRIPTION OF AERODYNAMIC TESTS

Studies were made at no cost to this NASA program of the mean velocity and turbulence intensity distributions at the tertiary exit plane and at various locations downstream. The development of the free jet (tertiary) plume was also studied. A schematic of the free jet test arrangement is shown in Figure 14. A nominal 6 inch diameter coannular inner jet with the core flow plugged upstream is shown extending 3 feet downstream of the free jet. For most tests, the inner jet velocity equalled the free jet velocity to prevent any "dead" flow regions. The directions (N, S, E, and W) are shown around the tertiary for later reference to traverse direction. Laser velocimeter and hot wire measurements were made at Stations A, B, C, and D as shown in Figure 14. Measurements were made at tertiary Mach numbers of 0.3 and 0.174. Axial, radial, and azimuthal test results are as follows.

3.3.1 Mean Velocity Profile Test

The radial variation of the mean velocity for two axial positions is shown in Figure 15. Note that at the tertiary exit plane (i.e., $X/D = 0$) the radial mean velocity profile is relatively uniform for the two radial traverses and for both Mach numbers. Note that at the inner jet exit plane (i.e., $X/D = 0.75$), the mean velocity has decayed slightly from its value at $X/D = 0$. This is discussed below in detail. The radial mean velocity profile is uniform for both Mach numbers at this test location, except near the test nozzle wall (due to boundary layer buildup, also discussed below) and in the tertiary mixing (i.e., shear) layer. The mean velocity in the tertiary shear layer is lower for the Mach number 0.174 condition than for the 0.3 condition.

The axial variation of the mean velocity is shown in Figure 16 for two radial positions. It is seen that the tertiary potential core (i.e., $r/r_0 = 0$ position) extends to at least five tertiary diameters for both Mach numbers. Thus, the jets issuing from the inner nozzle do not detect any decay in the tertiary flow from two to at least five tertiary flow diameters. Note the reduction in centerline mean velocity between Location 1 and 2 diameters downstream for both Mach numbers. This reduction is due to the inner nozzle exit velocity being equal to the tertiary nozzle exit velocity. Since the

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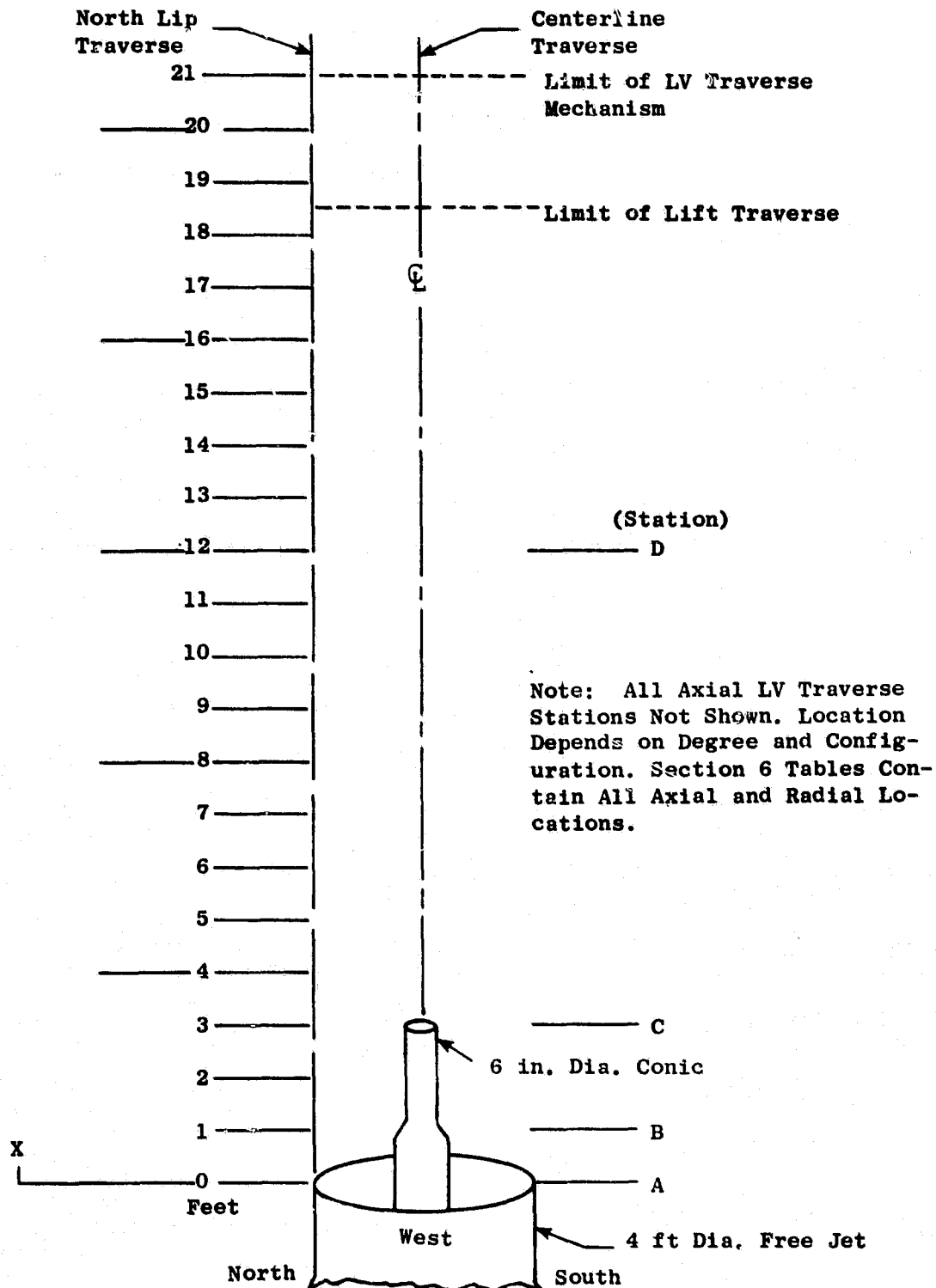


Figure 14. Schematic of Free Jet Test Arrangement,
View Looking East.

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- $D = 4.0$ ft
- $r_o = 2.0$ ft

Symbol	M	U_{Max} -fps	Traverse
○	0.300	349	E → W
●	0.174	213	E → W
□	0.300	349	S → N
■	0.174	213	S → N

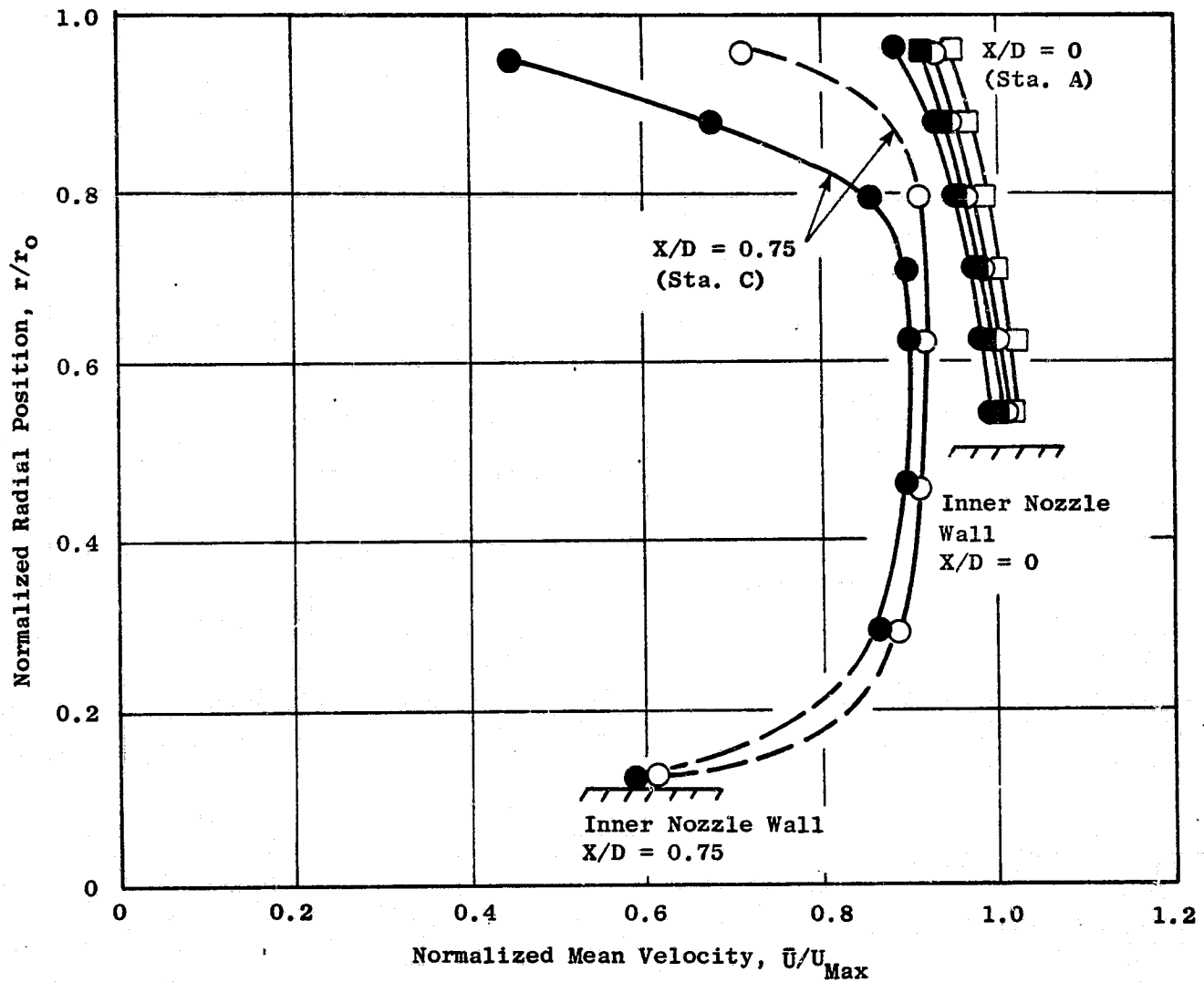


Figure 15. Radial Variation of Free Jet Mean Velocity, Laser Velocimeter Data.

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- $D = 4.0$ ft
- $r_o = 2.0$ ft

Symbol	M	U_{Max} fps
○	0.300	349
●	0.174	213

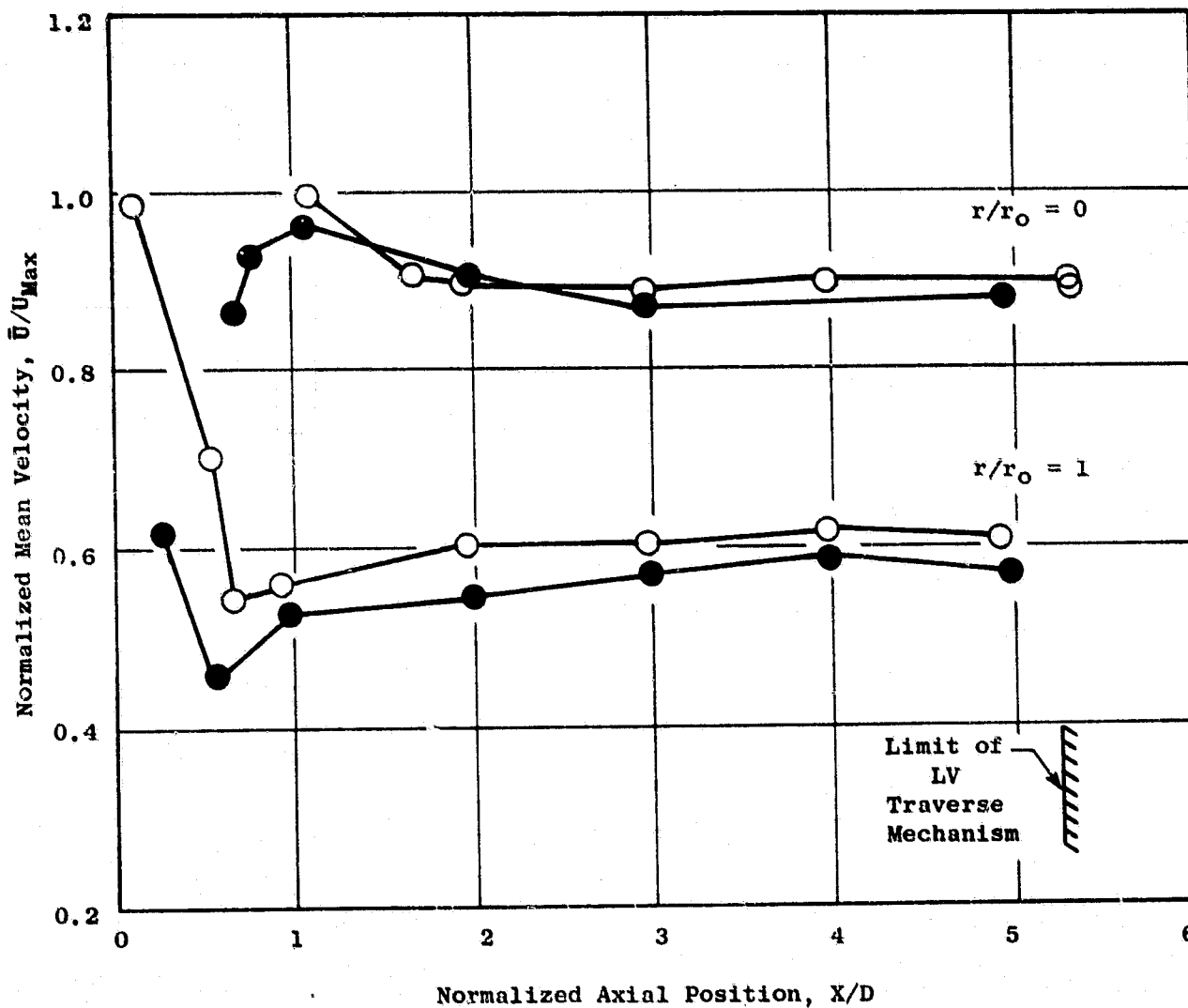


Figure 16. Axial Variation of Free Jet Mean Velocity Laser Velocimeter Data.

tertiary mean velocity at the inner nozzle exit is 10% less than that at the tertiary exit (as discussed below), the mixed velocity will be reduced. The complete extent of the potential core could not be described due to the limit of the laser velocimeter track system in the facility. However, beyond $X/D = 6$ (i.e., 24 ft), the velocity is expected to decay at the rate of $1/X$ as shown in Reference 2. The axial variation at $r/r_0 = 1$ shows a typical decay of mean velocity to approximately 60% of its maximum value, and thereafter maintains the same value for X/D between 2 to 5. This region of uniformity suggests a similarity of tertiary mean velocity profile throughout the range of traverse. Note that the value of mean velocity for $M = 0.174$ is again somewhat less than that for $M = 0.3$ at the shear layer region (i.e., $r/r_0 = 1$).

3.3.2 Turbulent Velocity Profile Test

The radial variation of axial turbulence velocity is shown in Figure 17 for two axial positions. The turbulence intensity levels appear relatively unaffected by Mach number or by traverse direction at the tertiary exit plane (i.e., $X/D = 0$). The turbulence levels are approximately 2.5% at the tertiary exit plane. At the exit plane of the inner jet (i.e., $X/D = 0.75$), the inner nozzle sees turbulence levels of less than 0.5% at $M = 0.3$ and approximately 2.5% at $M = 0.174$. Note that the turbulence intensity for $M = 0.174$ is greater than that for $M = 0.3$ for all radial positions at $X/D = 0.75$.

The axial variation of normalized turbulence is shown in Figure 18 for two radial positions. The turbulence level is relatively constant at $r/r_0 = 1$ for both Mach numbers for values of X/D greater than 2. The general distribution found here for the tertiary is similar to what has been observed for model scale subsonic tests (Reference 2).

3.3.3 Tertiary Plume Symmetry Test

The azimuthal variation of the mean velocity at the tertiary nozzle exit (i.e., $X/D = 0$) for $M = 0.3$ is shown in Figure 19. Hot wire data taken every 30° are shown for three radial positions. Laser velocimeter data were taken for only North and West traverses. The azimuthal variation in mean velocity

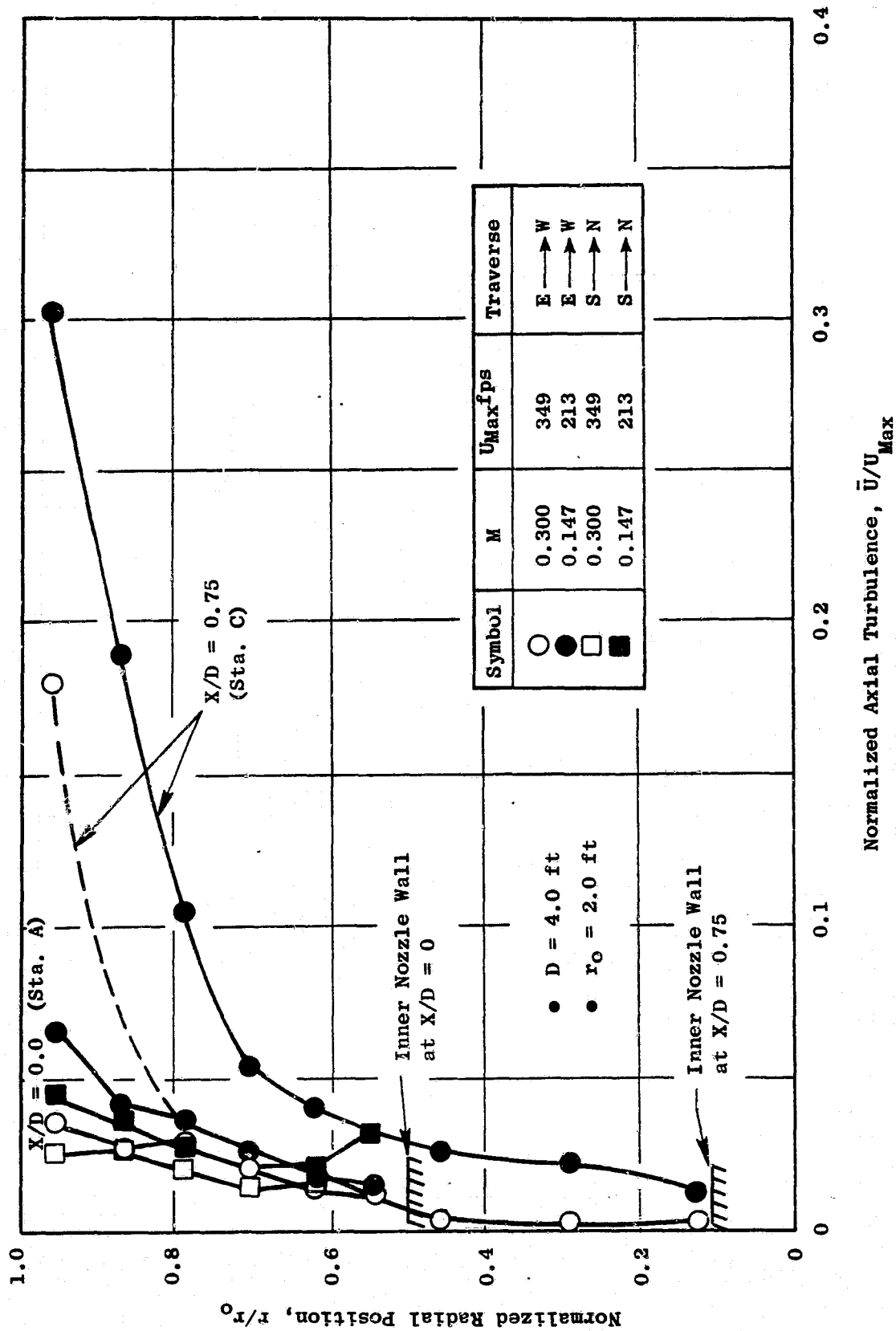


Figure 17. Radial Variation of Free Jet Axial Turbulence Laser Velocimeter Data.

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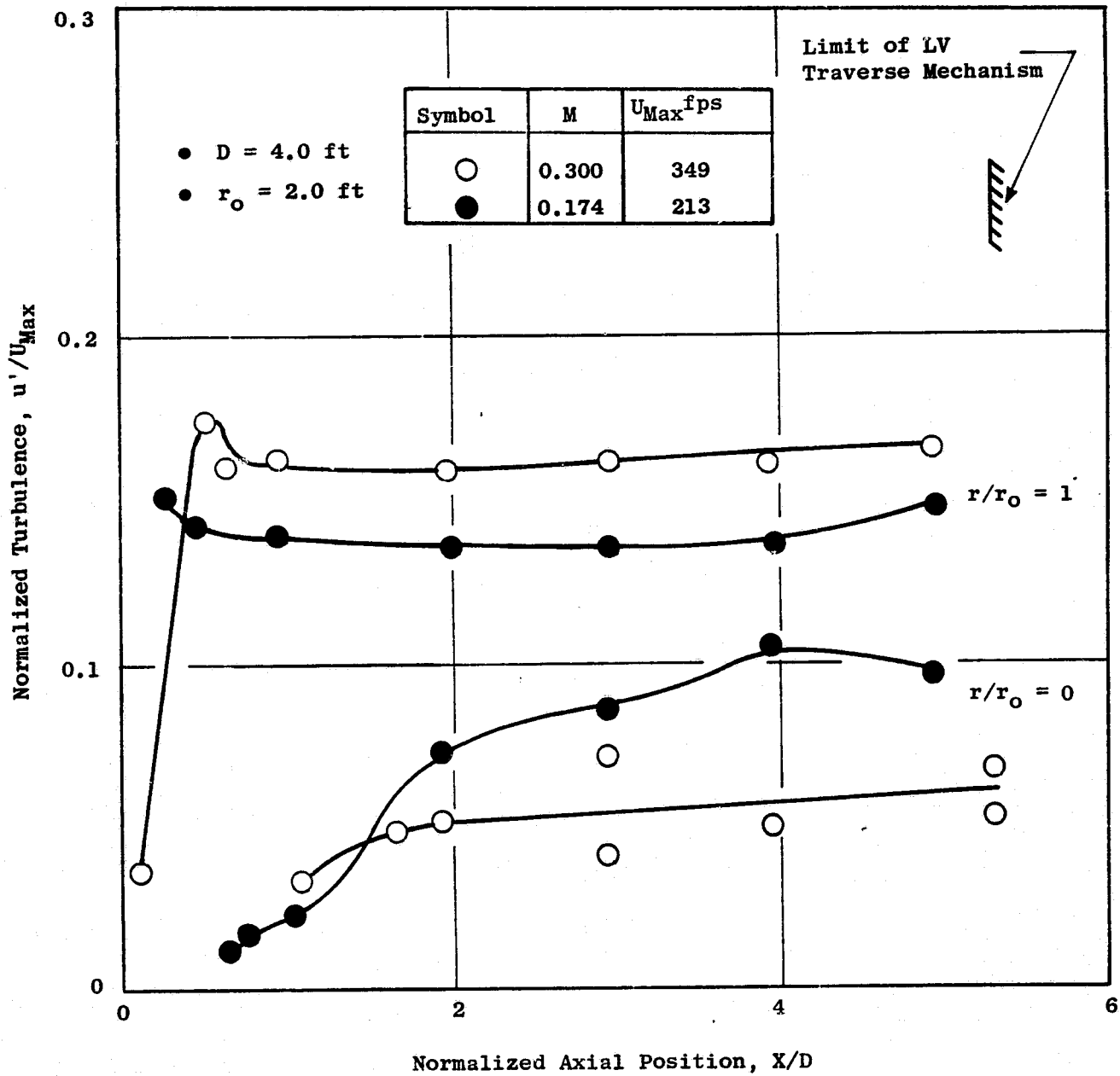


Figure 18. Axial Variation of Free Jet Axial Turbulence Laser Velocimeter Data.

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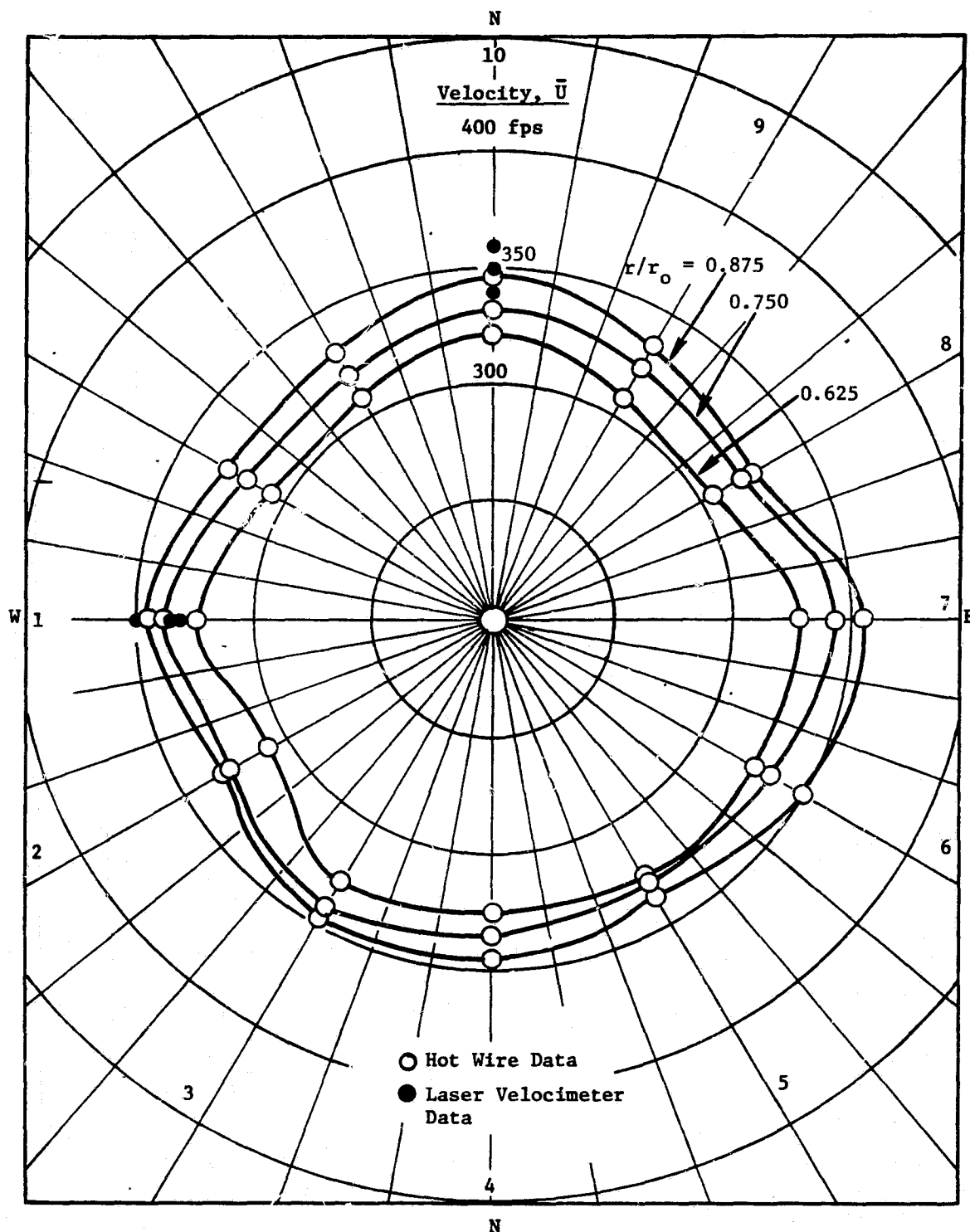


Figure 19. Azimuthal Variation of Mean Velocity at $M = 0.3$
Laser Velocimeter/Hot Wire Data.

for $M = 0.174$ is shown in Figure 20 for the same radial positions. Hot wire and laser velocimeter data show good agreement. The LV data for the West traverse were used to smooth out the curve at that location. Even through the actual variation at $M = 0.3$ appears worse than that at $M = 0.174$, on a percentage basis, the opposite is true. The average LV variation in mean velocity was calculated to be 2.33% for $M = 0.3$ and 2.80% for $M = 0.174$. The same trend is shown for averaged values obtained from hot wire data which are 2.60% for $M = 0.3$ and 2.95% for $M = 0.174$. Thus the design value of 3.0% was successfully achieved with some margin.

The azimuthal variation of turbulence intensity at the tertiary nozzle exit (i.e., $X/D = 0$) for $M = 0.3$ is shown in Figure 21. The azimuthal variation in turbulence for $M = 0.174$ is shown in Figure 22 for the same radial positions. Hot wire and LV data agree better in the $M = 0.3$ case (Figure 21) than in the $M = 0.174$ case (Figure 22). The average azimuthal turbulent intensity was calculated to be 2.26% for $M = 0.3$ and 3.26% for $M = 0.174$ for LV data. The same trend is again shown for hot wire results of 1.83% for $M = 0.3$ and 2.13% for $M = 0.174$. These results are considerably better than the design target of 6.0%.

3.3.4 Tertiary Plume Development

The normalized mean velocity profiles at various axial locations are shown in Figure 23 to describe the tertiary velocity decay and boundary layer buildup. The profiles shown are from hot wire radial traverses at five axial locations. The tertiary exit Mach number was 0.3 and the inner jet was "just bleeding flow" to eliminate any "base" regions. It is seen that the tertiary velocity profile is relatively constant at the tertiary exit plane (i.e., Station A, $X/D = 0$) and is equal to U_{Max} (i.e., $\bar{U}/U_{Max} = 1$). However, at $X/D = 0.27$ (Station B), the tertiary velocity profile has decayed to nearly $\bar{U}/U_{Max} = 0.9$. At $X/D = 0.75$ (Station C), the tertiary velocity profile peaks at $\bar{U}/U_{Max} = 0.9$. This peak value of \bar{U}/U_{Max} is constant for the downstream positions of $X/D = 1.5$ and 2.3 . The constant nature of the peak value of \bar{U}/U_{Max} in the axial direction is consistent with the constant values at $r/r_0 = 0$ and $r/r_0 = 1$ shown in Figure 16. This initial velocity decay, which is of the order of 10%, is a result of the tertiary flow expansion caused by the inner jet area reduction between Stations A and C. In addition, a sizable

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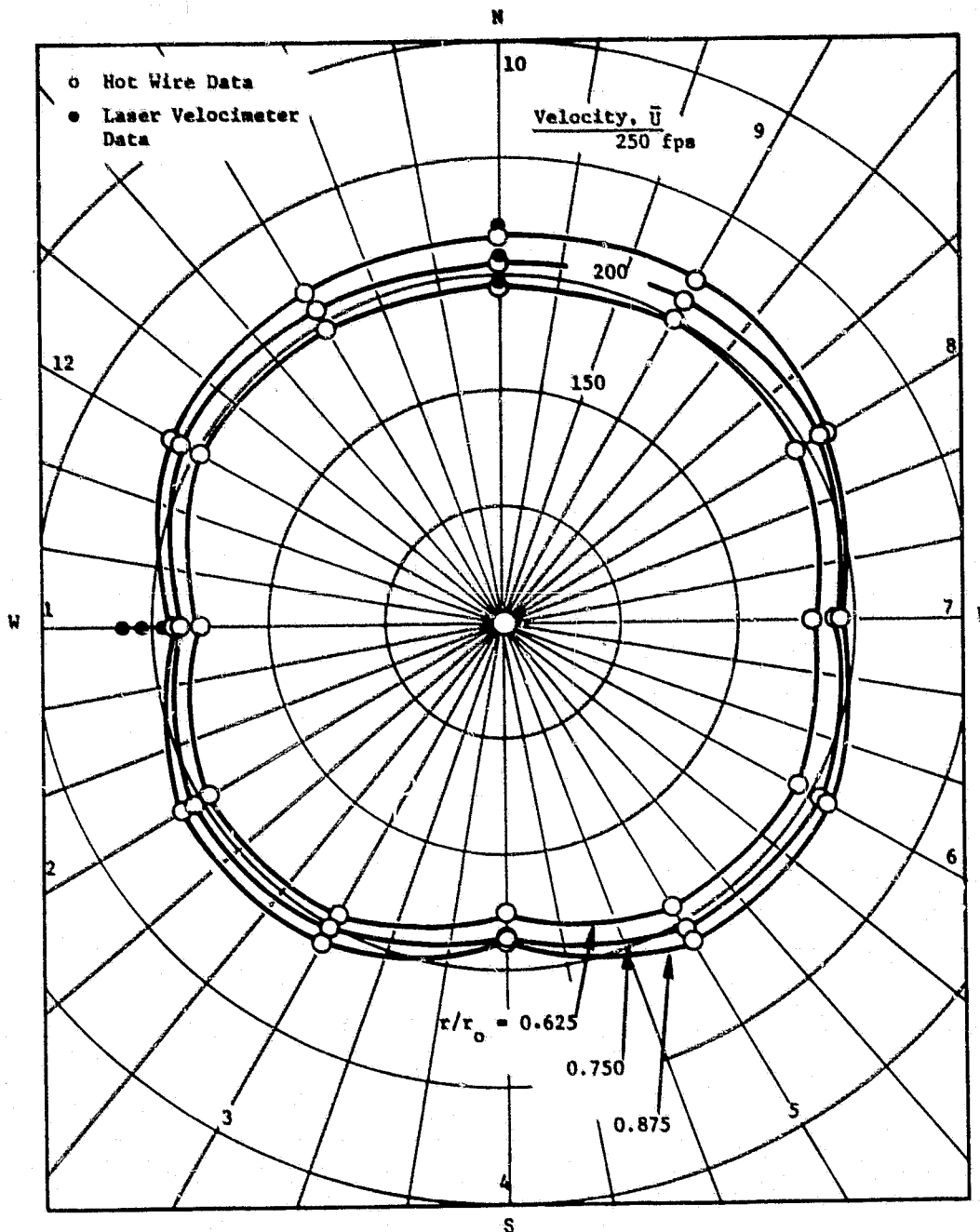


Figure 20. Azimuthal Variation of Free Jet Mean Velocity
at $M = 0.174$ Laser Velocimeter/Hot Wire Data.

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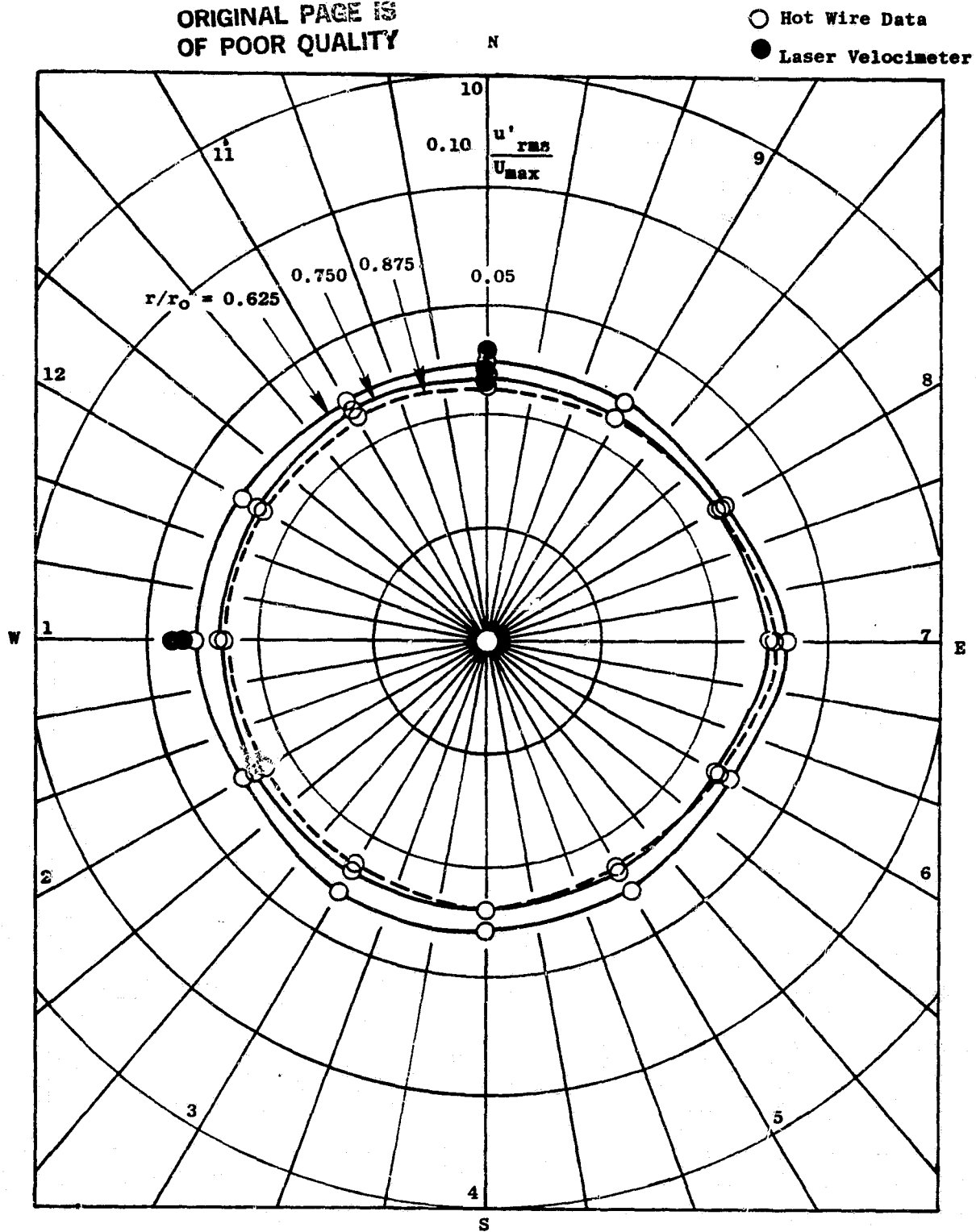


Figure 21. Azimuthal Variation of Free Jet Turbulence Intensity
at $M = 0.3$ Laser Velocimeter/Hot Wire Data $X/D = 0$.

○ Hot Wire Data

● Laser Velocity Data

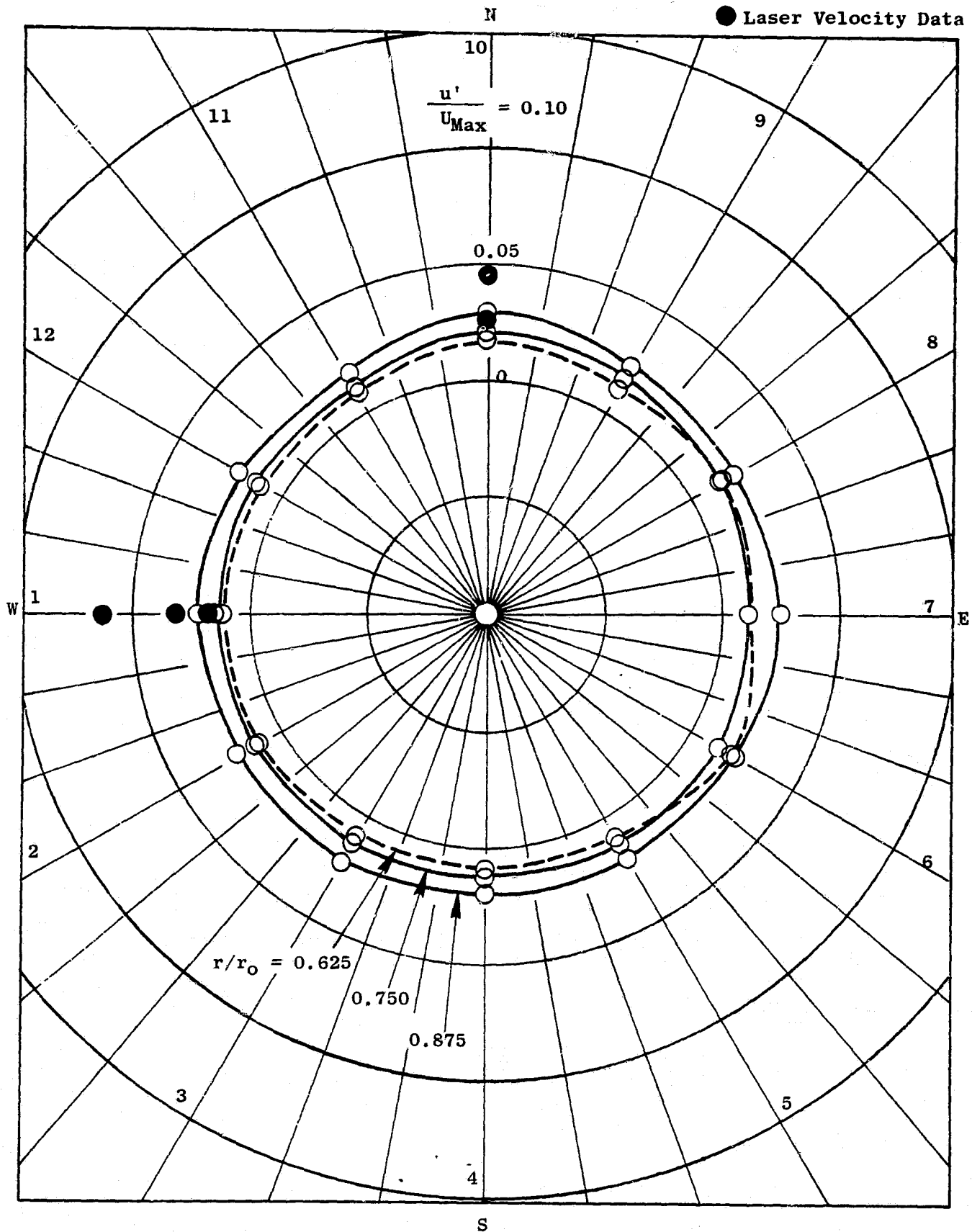


Figure 22. Azimuthal Variation of Free Jet Turbulence Intensity at $M = 0.174$ Laser Velocimeter/Hot Wire Data.

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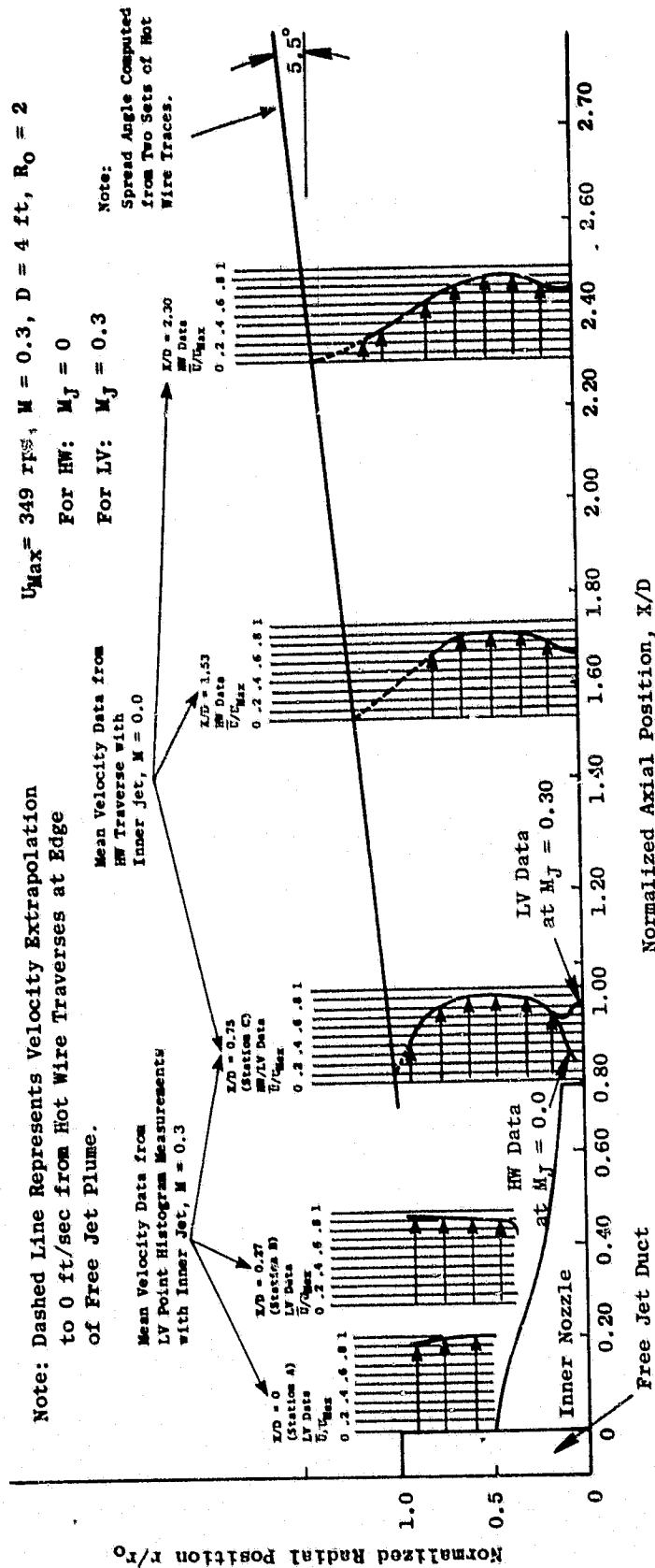


Figure 23. Axial Variation of Free Jet Mean Velocity HW/LV Data.

velocity deficit, due to the boundary layer buildup along the outside of the inner nozzle, is shown at Station C. Laser velocimeter traverses at Station C, with the inner jet flowing at the tertiary velocity, also showed the same results over the length of the inner jet nozzle (i.e., 10% reduction in tertiary mean velocity and large growth in boundary layer). The magnitude of these effects will, of course, depend upon the type of inner nozzle tested (i.e., tertiary expansion area ratio). For most tests in Cell 41, these effects should be taken into account.

The data show that the tertiary plume does not start spreading appreciably until it reaches the test nozzle exit plane. It then spreads at an angle of approximately 5.5° starting at $X/D = 0.8$ (See Figure 23). This spreading is assumed to be true for all azimuthal positions. This spreading rate of the plume is reasonably close to the classical spreading rate ($\sim 7^\circ$).

3.4 FACILITY OPERATING DOMAIN

The temperature-velocity-pressure ratio operating limits of the acoustic facility are shown in Figure 24. The upper limits for either fan or core flow are 1750°R in temperature and 4.5 to 6.0 in pressure ratio, as shown by the dashed line. Jet velocities below 600 ft/sec may be influenced by flow noise.

The range of test conditions set during this program is shown on this operating domain (Figure 24). Note that the outer (fan) flow conditions reached the facility limits in temperature and practically in pressure ratio. The inner (core) flow conditions were at substantially lower temperatures and pressures with two test points (Points 313 and 401) below the flow noise limit. The mixed flow conditions were, however, above this lower limit. The conic nozzle conditions extended the outer flow curve as shown.

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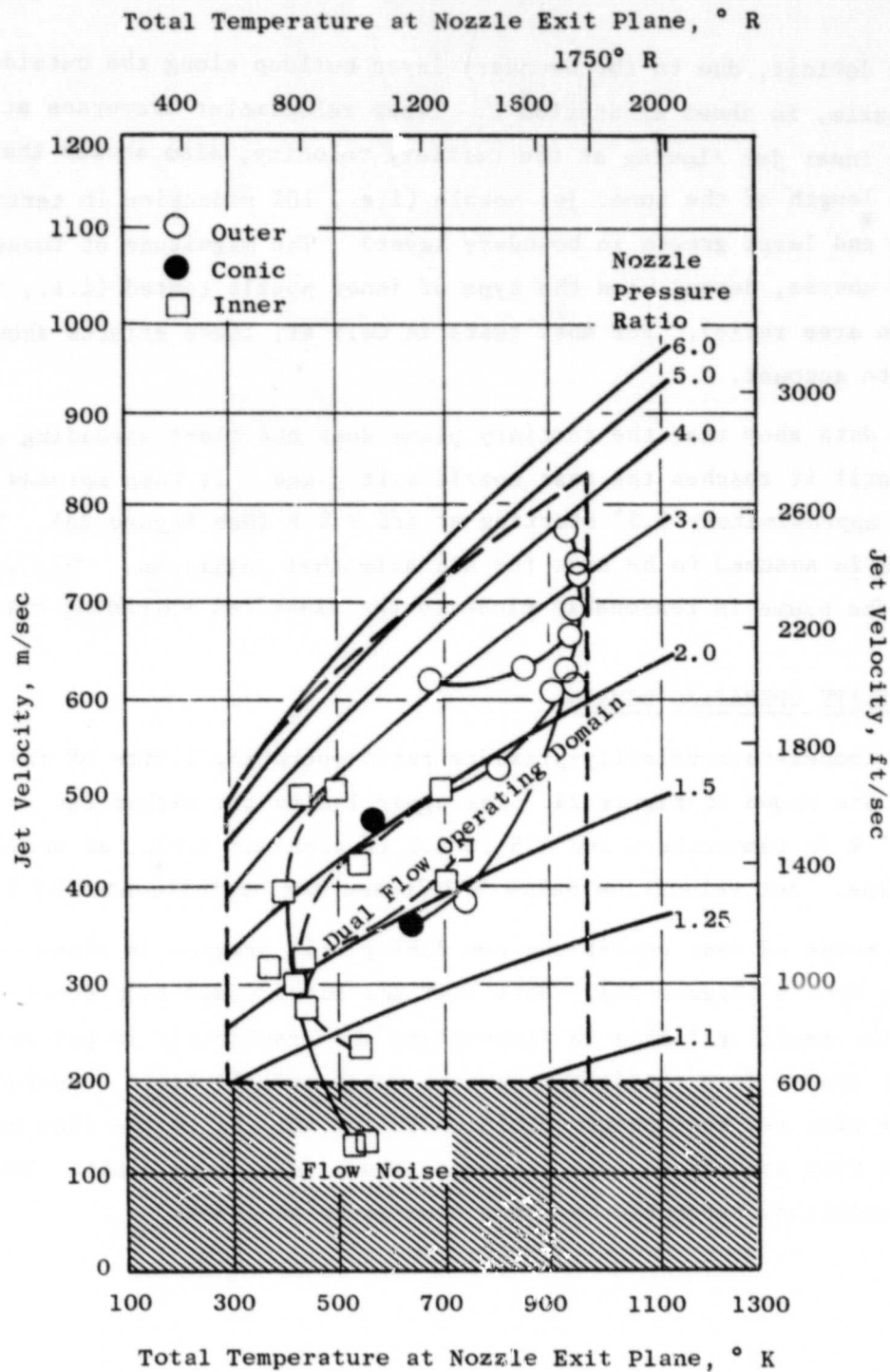


Figure 24. Dual Flow Operating Domain.

4.0 DATA ACQUISITION AND REDUCTION

4.1 ACOUSTIC DATA ACQUISITION AND REDUCTION

A flow chart of the acoustic data acquisition and reduction system is shown in Figure 25. This system has been optimized for obtaining the acoustic data up to the 80 kHz 1/3-octave center frequency. The microphone type used to obtain 80 kHz data is the B&K 4135, 0.64 cm, condenser microphone for far field measurements. All testing is conducted with microphone grid caps removed to obtain the best frequency response. The cathode followers used in the chamber are transistorized B&K 2619 for optimum frequency response and lower inherent system noise characteristics relative to the 2615 cathode follower. All systems utilize the B&K 2801 power supply operated in the direct mode.

The output of the power supply is connected to a line driver adding 10 dB of amplification to the signal as well as adding "preemphasis" to the high frequency portion of the spectrum. The net effect of this amplifier is a 10 dB gain at all frequencies, plus an additional 3 dB at 40 kHz and 6 dB at 80 kHz due to preemphasis thus increasing the ability to measure low amplitude high frequency data. In order to remove low frequency noise, high pass filters with attenuations of approximately 26 dB at 12.5 Hz decreasing to 0 dB at 200 Hz were installed in the system.

The tape recorder amplifiers have a variable gain from -10 dB to +60 dB in 10 dB steps and a gain trim capability for normalizing incoming signals. High pass filters are incorporated in the acoustic data acquisition systems to enhance high frequency data previously lost in the tape recorder electronic noise floor for microphones from 110° to 160°. The microphone signal below the 20 kHz 1/3-octave band is filtered out, and the gain is increased to boost the "signal-to-noise" ratio of the remaining high frequency signal. For microphones from 110° to 160°, both the filtered and unfiltered signals are recorded on tape. The sound pressure levels for frequencies below 20 kHz are calculated using the filtered signal. The jet noise spectra at a given angle are then obtained by computationally merging these two spectra.

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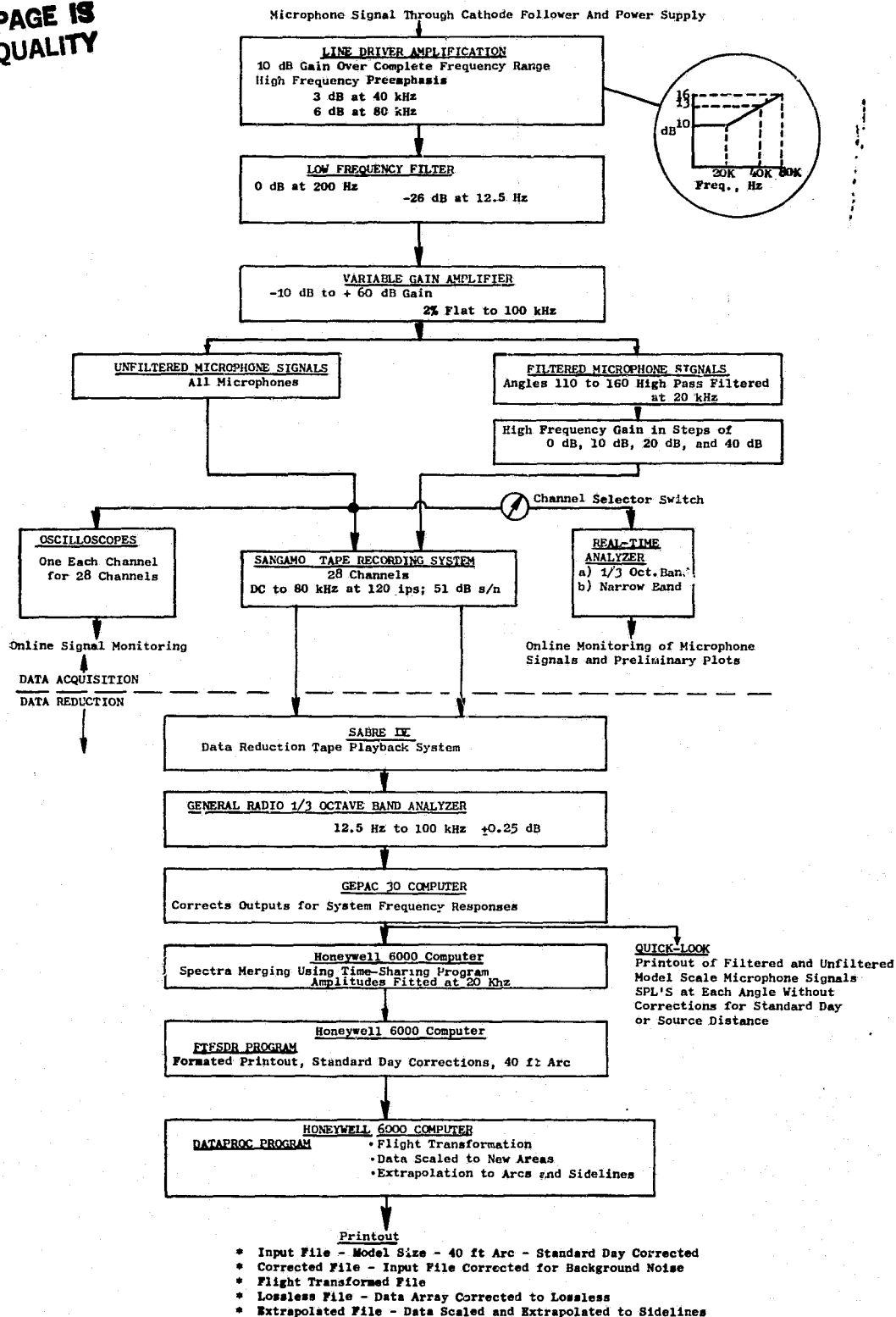


Figure 25. Acoustic Data Acquisition and Reduction System.

The prime system used for recording acoustic data is a Sangamo/Sabre IV, 28-track FM recorder. The system is set up for wideband Group I (intermediate band double extended) at 120 ips tape speed. Operating at 120 ips tape speed provides the improved dynamic range necessary for obtaining the high frequency/low amplitude portion of the acoustic signal. The tape recorder is set up for $\pm 40\%$ carrier deviation with a recording level of 8 volts peak-to-peak. During recording, the signal gain is adjusted to maximum without exceeding the 8 volt peak-to-peak level.

Individual monitor scopes are used for observing signal characteristics during operation. On-line data monitoring was available for this program via a Rockland narrow band analyzer or a General Radio 1921 1/3-octave analyzer with their outputs on display scopes or hard copy via Tektronic plotter.

Standard data reduction is conducted in the General Electric AEG Instrumentation and Data Room (IDR). The data tapes are played back on a CBC3700B tape deck with electronics capable of reproducing signal characteristics within the specifications indicated for wideband Groups I and II. An automatic shuttling control is incorporated in the system. In normal operation, a tone is inserted on the recorder in the time slot designed for data analysis. Tape control automatically shuttles the tape initiating an integration start signal to the analyzer at the tone as the tape moves in its forward motion. This motion continues until an "integration complete" is received from the analyzer at which time the tape direction is reversed and the tape restarts at the tone in the forward direction advancing to the next channel to be analyzed until all the channels have been processed. A time code generator is also utilized to signal tape position of the readings as directed by the computer program control. After each total reading is completed, the number of tape channels at each point is advanced to the next reading.

All 1/3 octave analyses are performed on a General Radio 1921 1/3 octave analyzer. Normal integration time is set for 32 seconds to insure good interaction for the low frequency content. The analyzer has 1/3 octave filter sets from 12.5 Hz to 100 kHz and has a rated accuracy of $\pm 1/4$ dB in each band. Each data channel is passed through an interface to the GEPAC 30 computer where the data are corrected for the frequency response of the microphone and

the data acquisition system, corrected to standard day (50° F, 70% RH) atmospheric attenuation conditions using the Shields and Bass model (used for this program), and processed to calculate the perceived noise level and OASPL from the spectra. For calculation of the acoustic power, scaling to other nozzle sizes, or extrapolation to different far field distances, the data are sent to the Honeywell 6000 computer for data processing. This step is accomplished by transmitting the SPL's via direct time-share link to the 6000 computer through a 1200 Band Modem. In the 6000 computer, the data are processed through the Full Scale Data Reduction (FSDR) Program where the appropriate calculations are performed (discussed below). The data printout is accomplished on a high speed "remote" terminal. In addition, the FSDR Program writes a magnetic tape for CALCOMP plotting of the data which will be used in the course of data analysis of the test results of this program.

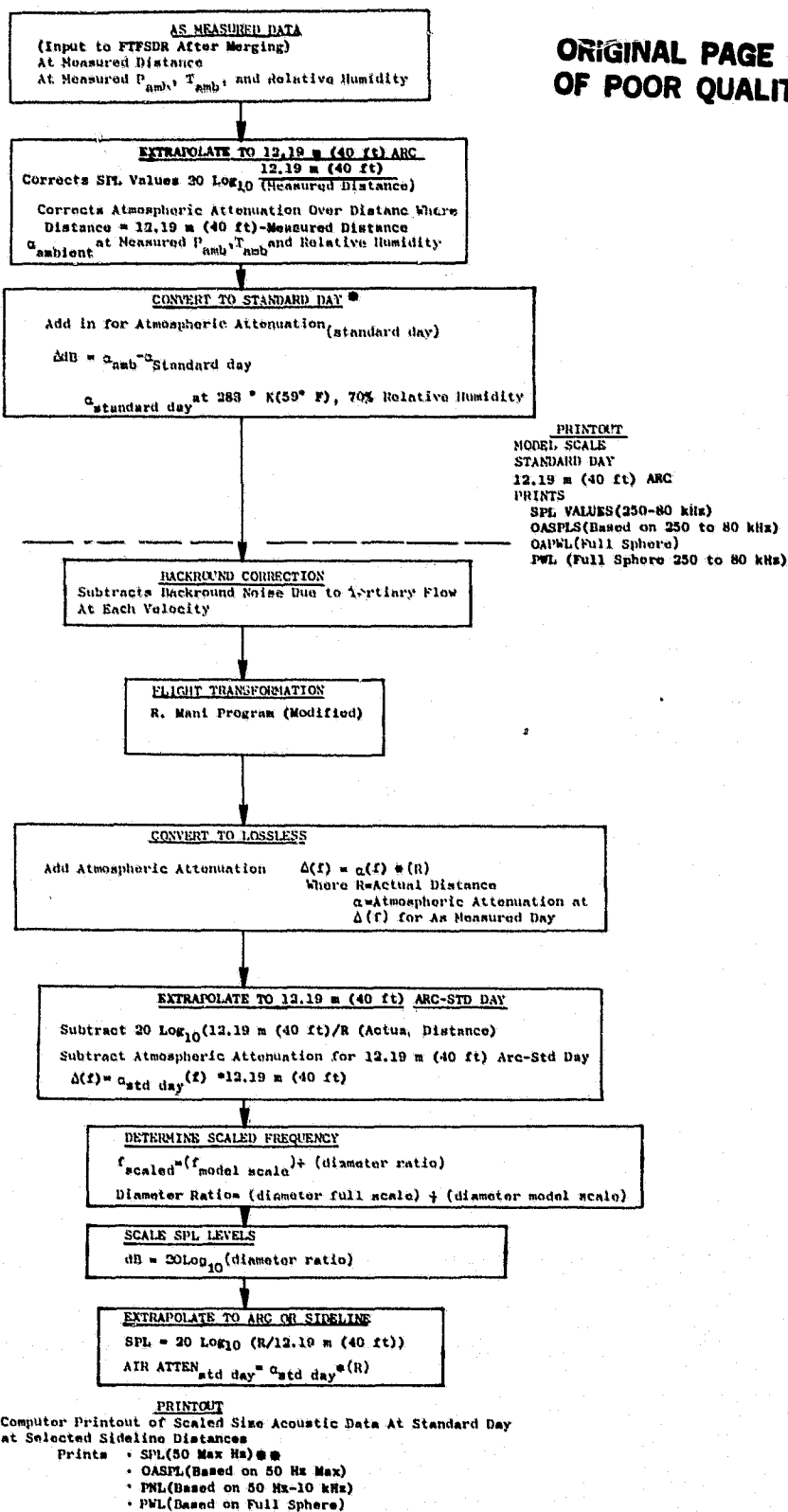
The detailed FSDR Program flow chart is shown in Figure 26. The as-measured data are first extrapolated from the measured distance to a common 40 ft arc. This is accomplished by subtracting out both the distance correction (i.e., $20 \log (40 \text{ ft distance/measured distance})$) and the atmospheric attenuation correction over the Δ distance (i.e., where $\Delta \text{ distance} = 40 \text{ ft} - \text{measured distance}$). Note that the Shields and Bass Pure Tone Method was used for all atmospheric attenuation corrections. The data are then converted to standard day at the 40 ft arc location by adding in the standard day correction (i.e., $\Delta \text{dB} = \alpha_{\text{amb}} - \alpha_{\text{std day}}$). The data are then printed out in tabulated form for SPL (from 250 Hz to 80 kHz), OASPL (based on 250 Hz to 80 kHz), and PWL (for full sphere, over-range 250 Hz to 80 kHz based on lossless data). For this program, data will not be shown below the chamber cutoff frequency of 250 Hz.

The full scale data for standard day at a 40 ft arc will then be extrapolated to a 2400 ft sideline. This is accomplished by subtracting out the distance correction, i.e., $20 \log (40 \text{ ft distance/measured distance})$ and the atmospheric attenuation over the distance (i.e., where $\Delta \text{ distance} = 40 \text{ ft} - \text{measured distance}$). The data are then printed out in tabulated form for SPL (from 50 Hz to maximum frequency), OASPL (based on 50 Hz to maximum frequency), PNL (based on 50 Hz to 10 kHz), PNLT (based on 50 Hz to 10 kHz), and PWL (for full sphere, over 50 Hz to maximum frequency but based on lossless data). The maximum frequency in this case depends upon the noise level, since only the positive levels are printed out.

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DATA PROCESSING



* Uses Shields and Bass Pure Tone Correction (Ref. NASA CR-2760)
*** Max Frequency Is a Function Of Diameter Ratio (10 kHz for Configuration 7,
8 kHz Max. for Configuration 3)

Figure 26. Acoustic Data Processing Flow Chart.

4.2 DESCRIPTION OF THE FLIGHT TRANSFORMATION TECHNIQUE

4.2.1 OBJECTIVE AND CONCEPT

The objective of the General Electric Free-Jet transformation process is to employ far field SPL spectra at various angles to the jet axis (typically for $20^\circ \leq \theta_j \leq 150^\circ$ in increments of 10°) obtained in a free jet experiment and transform it to yield SPL spectra as would be measured in a true moving frame experiment.

The concept employed is that with area ratios of 50:1 or so and with the primary nozzle exhaust plane displaced aft of the free-jet plane sufficiently to permit acquisition of acoustic data in the inlet arc (say up to $\theta_j = 150^\circ$), proper aerodynamic simulation of the effects of forward flight is achieved, but that in terms of the acoustic simulation of the effects of uniform flow over the primary jet plume noise sources, the free jet achieves this only to a limited extent. In other words, the free jet achieves the effect of the right source mix radiating however into an environment that more nearly approaches a static environment rather than the environment of sources shrouded by either a finite or infinite extent of uniform nonturbulent flow. (The basis of several previous investigations has been to assume that a well defined region of uniform, nonturbulent flow surrounds the sources. This well defined region is taken as a doubly infinite cylinder of constant circular section equal to the cross section of the free-jet exhaust plane.). The acoustic sources in a free-jet, of course, do not radiate into a completely static environment and hence some propagation effects of the free-jet flow do have to be accounted for.

Based on the above picture, the broad outline of the procedure adopted is as follows. Defining as the "static" directivity, the directivity pattern (in various frequency bands) that the sources (of the primary jet exhaust plume altered by the effects of relative velocity due to imposition of the free-jet) may be expected to produce if they radiated into a quiescent environment, we first deduce this "static" directivity from the measured free-jet experimental data by correcting the latter for propagation effects of the free-jet. Since the free-jet flow field includes intensely turbulent shear layers through which the sound field of the sources must pass before

it reaches the far field microphones (located in the quiescent ambient), some degree of empiricism (especially for the high frequency sound) is involved in attempting to account for these propagation effects.

Once such a static directivity is extracted, it still remains to deduce what the noise signature of the source distribution would be if the source distribution was not stationary relative to the ambient but moving relative to the ambient at the flight velocity. A multiple decomposition procedure suitable for the broad band jet noise problem which attempts to synthesize the static directivity by ascribing it to a mix of uncorrelated singularities was developed in order to enable the prediction of the flight noise. Once such a decomposition is completed, we simply apply the dynamic exponent applicable to each singularity to derive the flight noise signature.

In summary, the method starts with narrow band directivities from the free-jet experiment in various third octave bands, corrects these directivities for free-jet propagation effects in a frequency dependent manner to retrieve the "static" directivity, synthesizes the "static" directivity by a suitable mix of uncorrelated singularities and finally applies the dynamic effect appropriate to each singularity to predict the flight noise. It is an inherent feature of the method that it works separately with each third octave band directivity pattern. The final flight predictions can then be summed to yield either OASPL or PNL directivities or simply displayed as flight SPL spectra at various angles to the jet axis. (Doppler shift effects on the frequency are fully accounted for).

4.2.2 ALGORITHM DESCRIPTION

A detailed algorithm description is shown in Figure 27.

4.2.3 FURTHER DETAILS

The recommended procedure for transformation of free-jet noise to flight noise consists of first extracting the "basic" directivity from the measured free-jet data and then applying the "dynamic" effects to determine the noise in flight. The "basic" directivity is the directivity that the sources associated with the primary nozzle plume would create, if they

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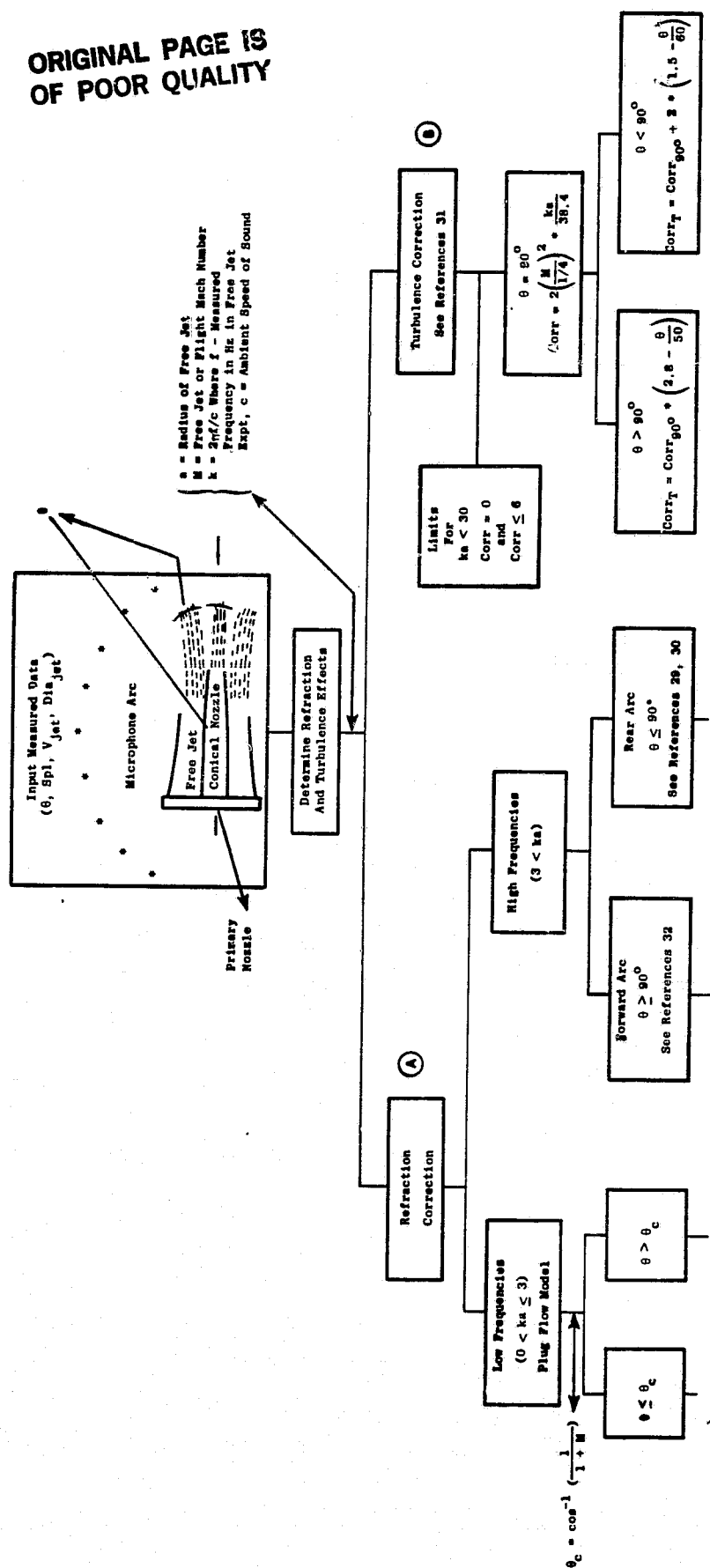


Figure 27. Algorithm Description.

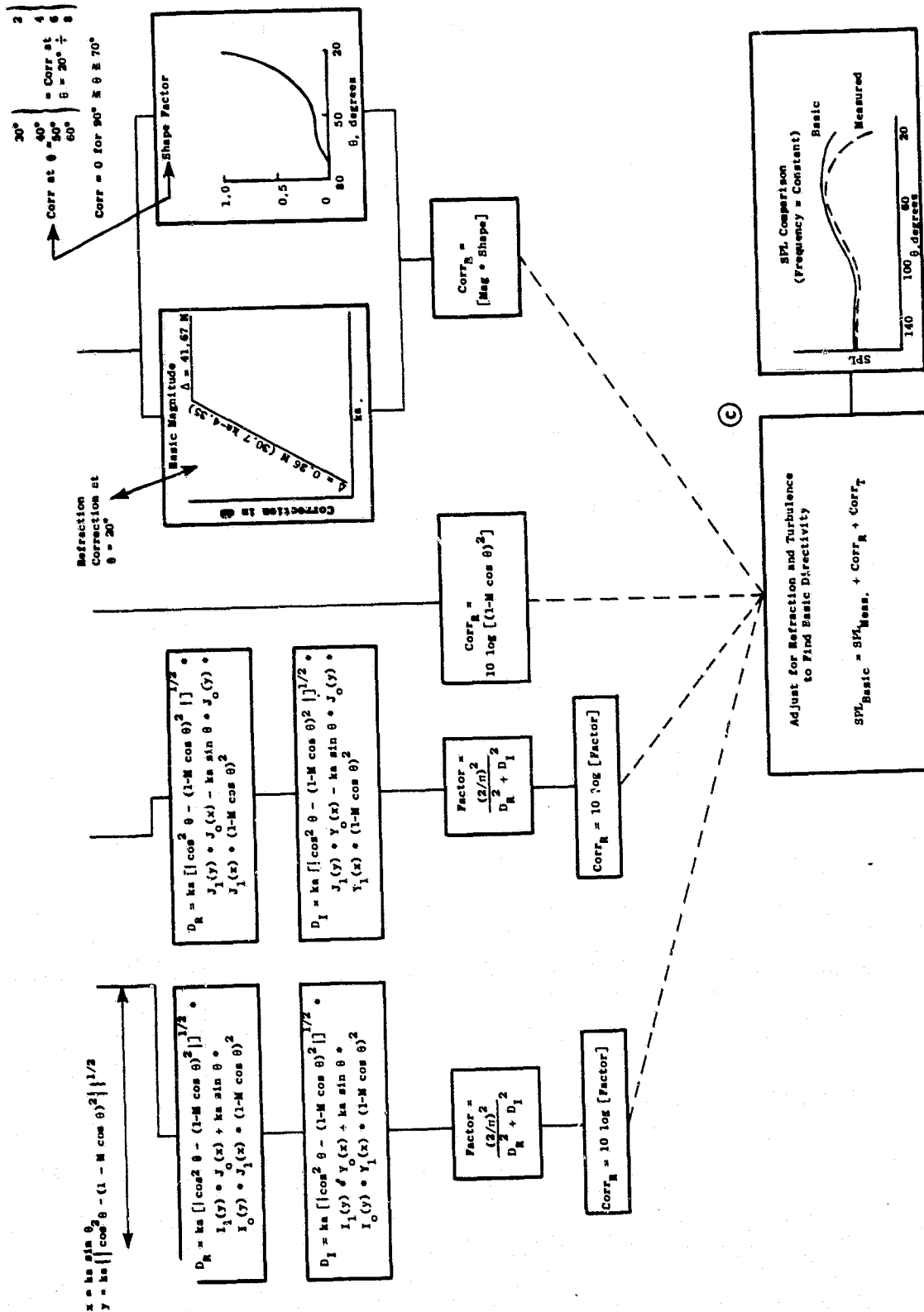


Figure 27. Algorithm Description (Continued).

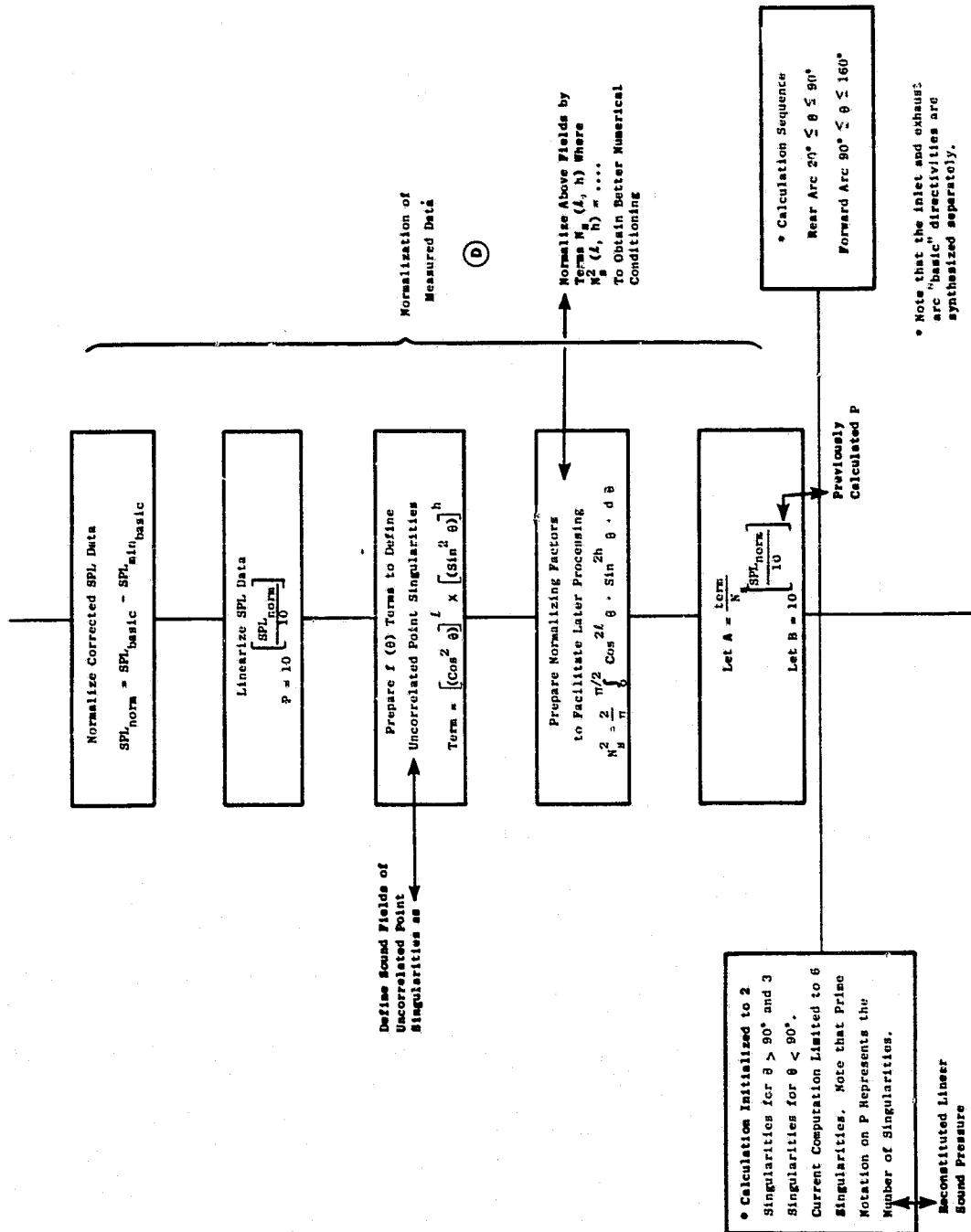


Figure 27. Algorithm Description (Continued).

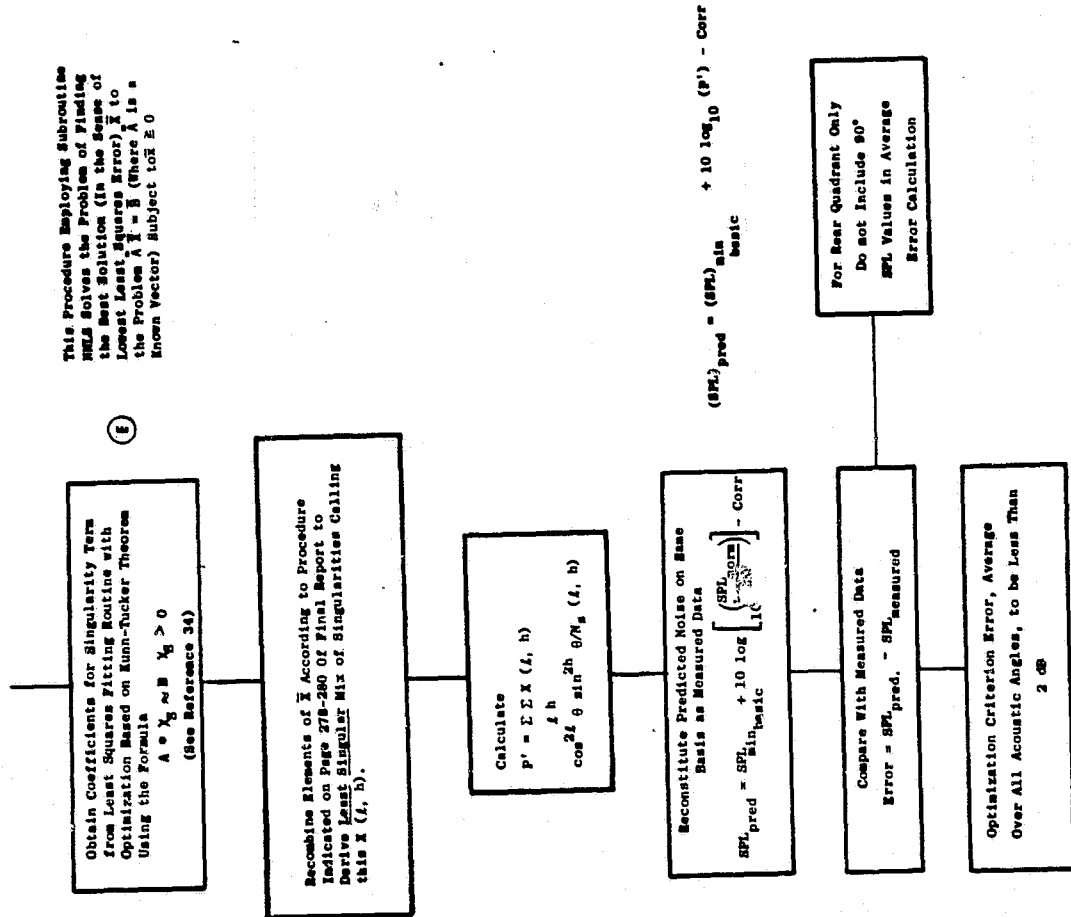
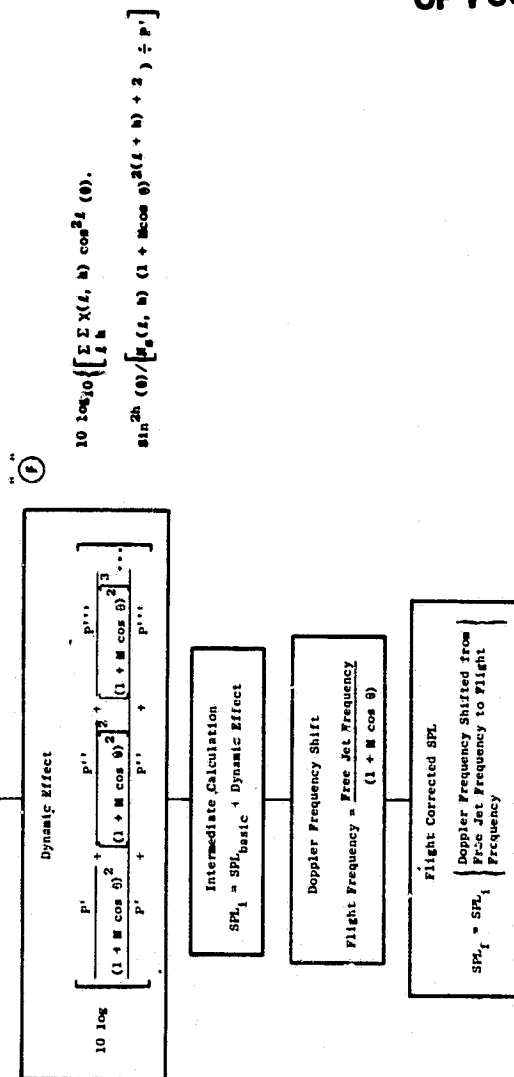


Figure 27. Algorithm Description (Continued).



$$10 \log_{10} \left\{ \sum_{l=1}^L \sum_{m=1}^M X(l, m) \cos^2 \theta \right\}$$

$$SPL_{2h}(\theta) / [p_a(l, m) (1 + M \cos \theta)^2 (L + 2) \div p']$$

List of Symbols

A	An Input Matrix to the Least Squares Fitting Procedure	L	Numerical Value Varies with Level of Singularity Considered
B	An Input Vector to the Least Squares Fitting Procedure	M	Mach Number = (Free Jet Velocity) ÷ (Ambient Speed of Sound)
Corr	An Acronym used to Identify the Refraction and/or Turbulence Correction	$M_0(l, m)$	Normalizing Factor, Function of Singularity
D_n	Real Root of Denominator Term in Solution of the Sound Pressure for the Plug Flow Model	P	Linear Sound Pressure
D_i	Imaginary Root of Denominator Term in Solution of the Sound Pressure for the Plug Flow Model	P_{ref}	0.0002 Microbars
P	Subscript for Flight Corrected SPL	R	Subscript for Refraction Correction
h	Numerical Value Varies with Level of Singularity Considered	S	Singularity Subscript
i	Subscript on SPL to Identify an Intermediate Calculation	SPL	Sound Pressure Level = $10 \log (p^2/p_{ref}^2)$
$I_n(x)$	Modified Bessel Function of the First Kind of Order n, Argument in is x	T	Subscript for Turbulence Correction
$I_n(y)$	Modified Bessel Function of the First Kind of Order n, Argument in is y	Term	Acronym Used to Identify a Unique Algebraic Grouping
$J_n(x)$	Bessel Function of the First Kind of Order n, Argument in is x	X	Bessel Function Argument, $x = ka \sin \theta$
$J_n(y)$	Bessel Function of the First Kind of Order n, Argument in is y	Y	A Vector Derived from Least Squares Fitting, Function of Singularity
ka	Frequency Parameter = (Free Jet Frequency Rad of Interest in Radians per Second) x (Free Jet Radius in Feet) ÷ (Ambient Speed of Sound)	Y	Bessel Function Argument, $y = ka [\cos^2 \theta - (1 - M \cos \theta)^2]^{1/2}$
		$Y_n(x)$	Bessel Function of the Second Kind of Order n, Argument x
		θ	Angle from the Jet Axis Referred to the Exhaust
		θ_c	Critical Angle that Defines the Jet Zone of Silence = $\cos^{-1} (1/(1 + M))$

Figure 27. Algorithm Description (Concluded).

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radiated into a static rather than the free-jet environment.

Two phenomena are involved that change the directivity of the noise radiated by the sources associated with the jet plume when the jet is exhausting into a free-jet environment as opposed to a static environment.

These are

a. Refractive Effects of the Free-Jet Flows

To deduce the refractive effects of the free-jet flow, the following procedure is adopted.

1. At low frequencies ($k_o a < 3$), the plug flow model solution for a point pressure source is used.

$$p' \propto (1 - M_{fj} \cos \theta)^{-2}$$

2. At high frequencies ($k_o a > 3$), the asymptotic high frequency solution for a pressure source is used

$$p' \sim (1 - M_{fj} \cos \theta)^{-1}$$

At these values of the frequency parameter ($k_o a < 3$), the exhaust arc was used to deduce the refractive effect following the method due to Schubert (Reference 7). In this method,

- First the refractive dip in dB along the jet exhaust axis is determined as being proportional to the product of the jet Mach number and the frequency parameter.

$$R_{\theta_j} = 0^\circ \propto M_{fj} k_o a$$

- Then, a shape factor that is essentially Mach number and frequency independent is used to determine the refractive dip at other angles. For the range $3 < k_o a < 6$, Ribner's results were used with a linear extrapolation in the range $6 < k_o a < 1.25$.
- Based on experimental data, the refractive dip in the exhaust arc for $k_o a > 6$ was considered independent of $k_o a$, but still linearly proportional to M_j .

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b. Absorptive Effects of the Fine Grain Turbulence in the Shear Layer of the Free-Jet

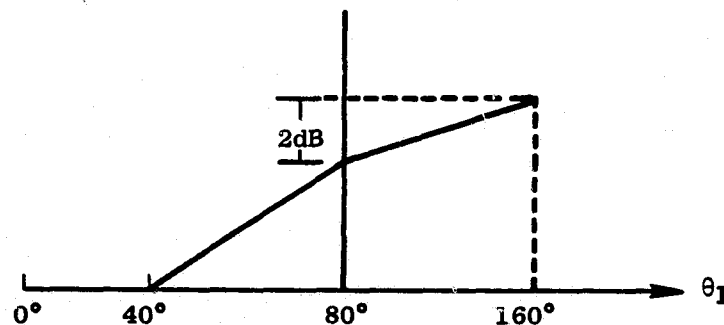
This relates to the fact that fine-grained turbulence in the shear layer of the free-jet can absorb sound, especially at high frequencies. This correction is based on Crow's theory that states that the effective absorption coefficient is proportional to the frequency, distance the sound traveled in the shear layer, and the square of the Mach number.

$$a_{\text{absorption coefficient}} \propto f M_{fj}^2 l$$

where M_{fj} = Free jet Mach number

l = path length

Based on the path length that the sound has to traverse, the absorption coefficient is assumed to vary with θ_I as shown in Figure below



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The absorption was calculated assuming an eddy viscosity

Eddy viscosity = 70μ for $M_{fj} = 0.25$ and $f = 50$ KHz. This yields corrections for $ka > 30$. The actual expressions used were

$$\left. \text{Corr}_T \right|_{\theta_I = 90^\circ} = \begin{cases} 2 \left(\frac{M}{1/4} \right)^2 \times \frac{ka}{38.4} & \text{for } ka \geq 30 \\ 0 & \text{for } ka < 30 \end{cases}$$

where M = Free Jet Mach number

$$k = \frac{2 \pi f}{C_o}$$

a = Radius of the Free Jet

$$\left. \text{Corr}_T \right|_{\theta_I > 90^\circ} = \left. \text{Corr}_T \right|_{\theta_I = 90^\circ} \times \left(1.5 - \frac{180 - \theta_I}{180} \right)$$

$$\left. \text{Corr}_T \right|_{\theta_I < 90^\circ} = \left. \text{Corr}_T \right|_{\theta_I = 90^\circ} \times \left(2.8 - \frac{180 - \theta_I}{50} \right)$$

From the measured free-jet data, the refraction and turbulences absorption corrections are added to obtain the "basic" directivity of the sources.

The basic directivity obtained above is assumed to be generated by a set of singularities F_o , F_x , F_y , etc., such that the sound field is a solution to

$$\nabla_p^2 + k_o^2 p = F_o \delta(x) \delta(y) \delta(z) + F_x' (x) \delta(y) \delta(z) + F_y \delta(x) \delta(y) \delta(z)$$

where F_o , F_x , F_y are mutually uncorrelated, so that they contribute to the far field only additively. As the mean square pressure of any singularity is symmetric about both $\theta = 0^\circ$ and $\theta = 90^\circ$, the inlet and exhaust arc are synthesized separately.

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The procedure adopted to determine the dynamic effect is as follows:

1. From the "basic" directivity pattern, obtain the normalized SPL's based on the least SPL in both the forward and aft quadrants.
2. Determine the linearized levels using

$$\frac{P}{P_0} = 10^{\frac{SPL - SPL_{min}}{10}}$$

3. Decide on a level of fitting using the criterion that the data ought to be reconstructed to within an error of 2 dB on the average. Then, assuming that the data ought to be reconstructed with the least singular distribution of uncorrelated sources possible, the problem simplifies to one of solving a least squares problem of the type find \bar{x} to minimize $|\bar{r}| = (A\bar{x} - b)$ subject to nonnegative constraint $\bar{x} \geq 0$. This done using an algorithm based on the Kuhn-Tucker theorem of optimization theory.
4. The singularities obtained using the Kuhn-Tucker theorem are then combined to obtain the least singular decomposition of the sources.
5. The appropriate dynamic effect is then applied to each singularity type to determine the correction that is applied to the measured free-jet data corrected for refraction and turbulence absorption. If the mean square of the sound pressure is obtained by adding the singularities as

$$P_{\theta}^{'2} = F_0 C^6 + F_1 C^4 S^2 + F_2 C^2 S^4 + F_3 S^4$$

where $C = \cos \theta$

$S = \sin \theta$

the dynamic effect is calculated using the relation

$$\text{Dynamic Effect} = 10 \log_{10} \frac{P_{\theta}^{'2}}{P_S^2} = 10 \log_{10} \frac{\frac{F_0 C^6}{k^8} + \frac{F_1 C^4 S^2}{k^8} + \frac{F_2 C^2 S^4}{k^8} + \frac{F_3 S^4}{k^6}}{P_S^{12}}$$

where $k = (1 + M_{fj} \cos \theta)$

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6. The levels are then corrected to

$$SPL_{i \text{ flight at free-jet frequency}} = SPL_{\text{basic}} + \text{dynamic effect}$$

7. Doppler frequency shift results in the flight frequency given by

$$f_{\text{flight}} = \frac{f_{\text{free jet}}}{(1 + M_{fj} \cos \theta)}$$

8. Hence $SPL_{\text{flight}} = SPL_i$ doppler shifted from free-jet to flight.

Thus, using the above transformation, the free-jet data can be transformed into flight data. Further discussion of this procedure is found in Reference 2.

4.3 LASER VELOCIMETER DATA ACQUISITION AND REDUCTION

The laser velocimeter system used to measure the jet plume mean velocity and turbulence levels was developed under a USAF/DOT-sponsored program and reported in detail in References 8 and 9. The general features of the systems are described below.

The basic optical system is a differential Doppler, backscatter, single-package arrangement mounted on a traverse platform as shown in Figure 28. This remotely actuated platform allows motion in three directions viz., in and out, sideways, and axial and the corresponding traverse capabilities are 32 in. (0.813 m), 32 in. (0.813 m) and 240 in. (6.1 m). Resolution was $\pm 1/16$ in. (0.1588 m) for each direction except for the axial travel, which has a resolution of $\pm 1/8$ in. (0.3175 m).

Aluminum oxide (Al_2O_3) powder of a nominal size of 1 micron diameter was used for seeding by injection into the inner, outer, and tertiary flows. The white appearance of the coannular model and tertiary in Figure 28. was caused by the seeding.

The laser velocimeter signal processor used is a direct-counter (time domain) type. Turbulent velocity probability distributions (histograms) were

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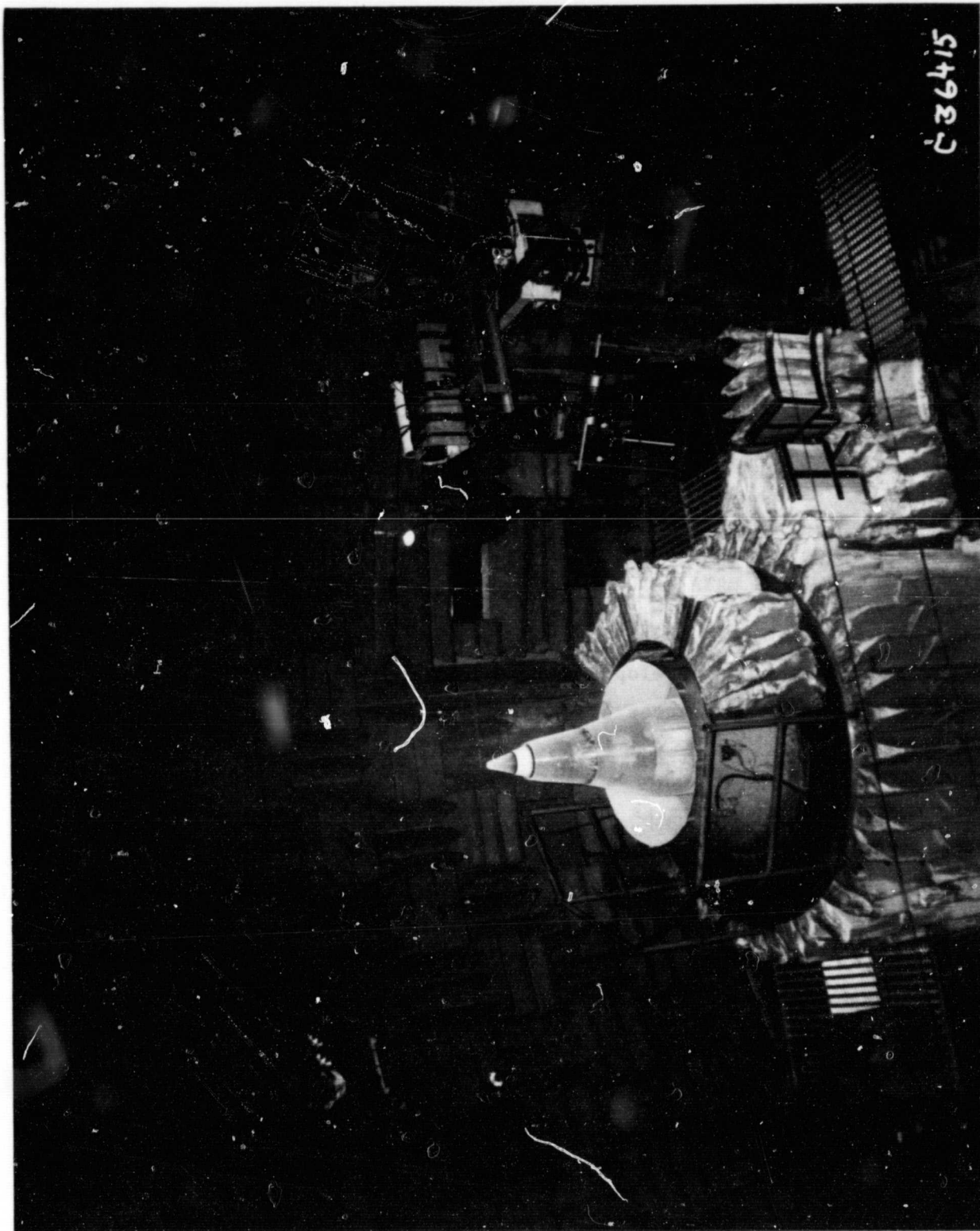


Figure 28. Laser Velocimeter Installed in the Anechoic Chamber.

recorded by a 256-channel pulse-height analyzer (NS633) and shown on an X-Y plotter. Both mean and rms turbulent axial velocities at discrete points were calculated using a PDP-11 computer with the tabulated data printed out on-line.

4.3.1 Basic Idea for LV Measurements

The concept of using laser velocimeter measurements for obtaining the mean and turbulent velocity profiles may be described as follows. Two beams of monochromatic light intersect at a point in space and set up a fringe pattern of known spacing (see Figure 29). The flow is seeded with small particles which pass through the measuring volume; the light scattered from the particles is collected, and the laser signal processor measures the time it takes for the particles to pass through each fringe. Knowing the distance and time for each validated particle enables the construction of the usual histogram (see insert on Figure 29). Then, by statistical techniques, the mean value (which corresponds to the mean velocity) and standard deviation (which corresponds to the turbulent velocity) are constructed. Although the principle of measurement is easy, the practical aspects of designing an electronic processing unit to monitor valid particles is of no small consequence. Investigators have had great difficulty performing measurements even in low velocity jets, and the extension to heated supersonic jet measurements represents a major achievement. The method of calculation used to obtain the mean velocity and turbulent velocity from laser velocimeter measurements is described below.

4.3.2 Histogram

A histogram is an estimate of the first-order probability density of the amplitude of a given sample. To obtain a velocity histogram, the time-dependent laser velocimeter velocity, $V(t)$, is accumulated and divided into classes bounded by values of velocity increments V_i . For each independent sample of velocity, a class interval is formed such that $V_i \leq V(t) \leq V_{i+1}$. During a measurement period, k_i number of velocity samples are accumulated in each sample class V_i . From the total sample of measured velocity points, the histogram is constructed as shown in Figure 29. The mean velocity and turbulent velocity derived from the histogram are obtained as described below.

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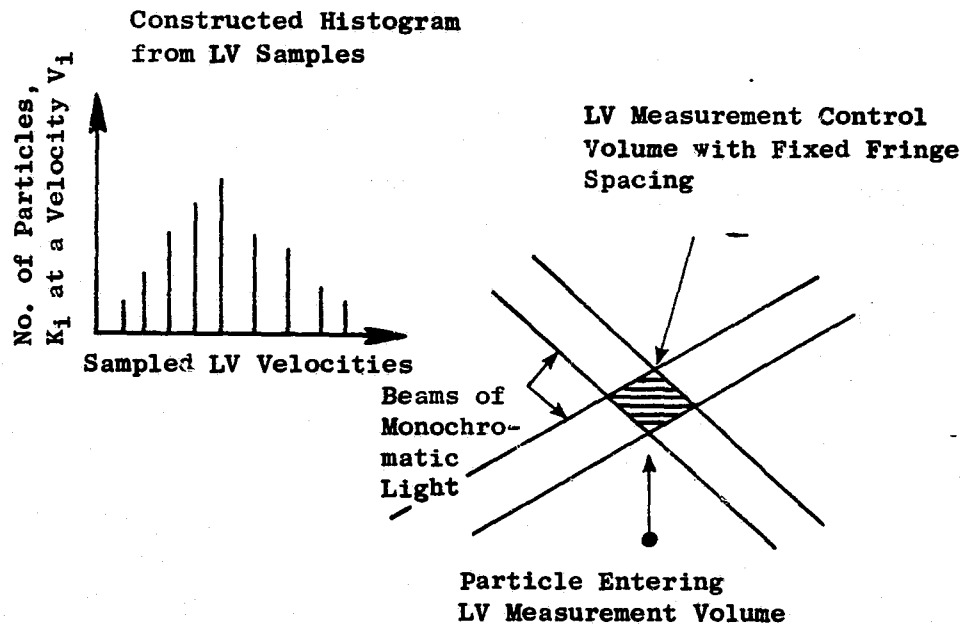


Figure 29. Schematic of Laser Velocity Measurements.

4.3.3 Mean Velocity

The mean velocity of the jet, \bar{v}_j , obtained from the discrete velocity sample is calculated by:

$$\bar{v}_j = \sum_{\text{All Class Intervals}} \left(\frac{v_{i+1} + v_i}{2} \right) \frac{k_i}{N}$$

All Class
Intervals

where

$\frac{v_{i+1} + v_i}{2}$ is the value of the sampled axial velocity component at the center of the class interval

k_i is the number of velocity samples in the class interval

N is the total number of velocity samples ($\sum k_i$) in the histogram

4.3.4 Turbulent Velocity

To obtain the axial turbulent velocity, u' , from the sampled data contained in the histogram, the standard square root of the statistical variance is performed. This calculation is performed using the following equation:

$$u' = \left[\sum_{\text{All Class Intervals}} \left(\frac{v_{i+1} + v_i}{2} - \bar{v}_j \right)^2 \frac{k_i}{N} \right]^{1/2}$$

4.3.5 Statistical Errors for LV Mean and Turbulent Velocity Measurements

With any large data sample, as obtained through the collection of velocity samples in a laser velocimeter histogram, guidelines for estimating the accuracy of each measurement are required. Tables II and III provide estimates of the percent error obtained for a mean velocity or turbulent velocity LV measurement.

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Table II. Estimated Percent Error in the LV Measurement of Mean Velocity with 95% Confidence.

N	u'/\bar{V}_j			
	0.2	0.1	0.05	0.025
10	14.1	7	3.5	1.76
20	9.3	4.7	2.3	1.20
30	7.4	3.7	1.9	0.93
40	6.3	3.2	1.6	0.80
60	5.0	2.6	1.3	0.65
120	3.6	1.8	0.9	0.45

Table III. Estimated Percent Error for LV Turbulent Velocity Measurements with 95% Confidence.

N	Percent Error
20	31.5
40	21.8
60	17.8
120	12.6
240	9.12
480	6.45
960	4.56
5,000	2.0
25,000	0.89

Table II lists the percent error for a 95% confidence statement of mean-velocity measurement as a function of the total number, N , of velocity samples contained in the histogram, and the turbulence level u'/\bar{V}_j . Table III gives the percent error for a 95% confidence statement of the turbulent velocity estimate as a function of N , the total velocity sample. As can be seen from Table II, a fairly small sample of velocity measurements is required to obtain a good estimate of the mean velocity. For the turbulent velocity, the number of data samples required for a good estimate increases substantially. The usual number of samples obtained with the General Electric laser velocimeter during a routine data-taking measurement performed during this program is approximately 1000 samples. For simple and quick diagnostic-type information, this amount of samples is sufficient. For more advanced measurements, such as turbulence spectra or two-point cross correlations, many more data samples are required and are currently obtained on a routine basis.

4.3.6 LV TRAVERSES FOR MEAN VELOCITY PROFILES

In addition to the above described stationary mode of LV operation for the determination of both mean and turbulent velocities at discrete points, the laser velocimeter is operated also in a traversing mode to obtain continuous profiles of mean velocities. These traverses are possible along any of the three LV axes. During these traverses, the data describing the velocity levels and the location of the measurement volume are recorded continuously on an X-Y plotter. The traversing speeds are adjusted as well as traverses repeated for obtaining well defined mean velocity profiles. While exact sampling rates during these traverses were not recorded in any way, an estimated rate of ~250 samples per inch of traverse is felt needed for a well defined smooth profile. Section 6.0 shows copies of the diagnostic mean velocity traverses taken for this program.

4.4 AERODYNAMIC DATA ACQUISITION AND REDUCTION

The facility operating parameters are monitored during testing at the control console to ensure that prescribed facility limits are not exceeded and for setting test point conditions.

The core and fan discharge pressures are measured from a single element on their respective rakes and are used for setting the desired nozzle pressure

ratios. These parameters also are routed through Dymec scanning system and recorded along with nozzle performance data by the aerodynamic data handling (ADH) system.

Facility temperatures are monitored at the control console using a Deric multichannel temperature indicator. The unit has a 24-channel capability and is designed for use with Type K thermocouples (chromel-alumel). It is used for safety monitoring and setting test point temperatures for the dual-flow system, which uses Type K temperature rakes. A system schematic is shown on Figure 30.

4.4.1 Nozzle Pressure and Temperature Measurements

A critical parameter used in evaluating acoustic test results is nozzle exhaust velocity. Determination of this velocity depends on an accurate determination of the exhaust temperature and pressure which, in turn, depend on adequate sampling across the stream to account for profile effects. Special multielement rakes have been designed for use on the single- and dual-flow systems.

The dual-flow system uses four rakes, two on each stream, each having three pressure and three temperature elements with spacing of the elements corresponding to centers of six equal area annular segments of the flow stream. These rakes use shielded Type K thermocouples (chromel-alumel) that have a recovery factor very close to unity.

Pressure measurement accuracy is controlled by the accuracy of the transducer used for the measurement. The scanivalve transducers used for nozzle performance measurements are rated at 0.1% of full-scale range.

4.4.2 Performance Data Processing

Aerodynamic parameters are calculated based on the temperature and pressure information acquired. The input information for nozzle performance consists of ambient pressure (P_0), nozzle discharge total temperature (T_T), and nozzle discharge pressure (P_T). For the case of dual-flow, similar parameters are required for the secondary stream, likewise for the tertiary stream.

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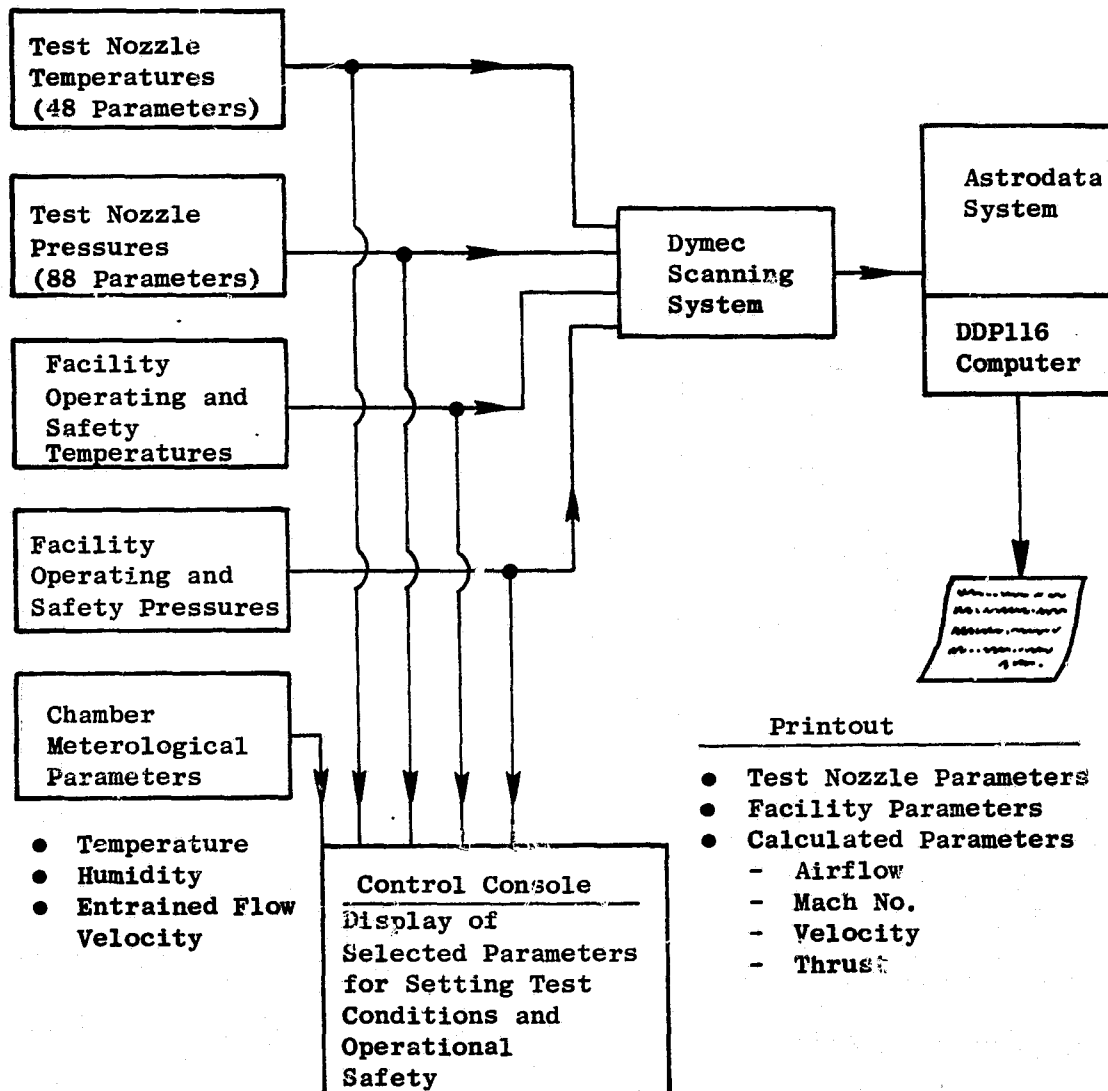


Figure 30. General Electric Anechoic Chamber Aerodynamic Data Processing System.

Output of the processing program consists of tabulations of the individual input parameters with their identification, averages of similar parameters (i.e., P_T rake average), and calculated parameters as indicated in the following paragraphs:

1. Gamma

For $T_S \leq 440^\circ \text{ K}$ (788.3° R); $\gamma = 1.4$

For $T_S > 440^\circ \text{ K}$ (788.3° R); $\gamma = \frac{2.23708}{(T_S)^{0.070271}}$

with T_S in $^\circ \text{ R}$

2. Isentropic or Ideal Mach number

$$M = \left(\frac{2}{\gamma-1} \right)^{1/2} \left(\left(\frac{P_T}{P_o} \right)^{\frac{\gamma-1}{\gamma}} - 1 \right)^{1/2}$$

$$\frac{T_T}{T_S} = 1 + \left(\frac{\gamma-1}{2} \right) M^2$$

$$T_S = T_T / \left(T_T / T_S \right)$$

where T_S is initially assumed equal to T_T . Starting with the gamma calculation, the above calibrations are repeated by an iteration procedure until the difference in T_S between iterations is < 1.0 .

3. Local Sonic Velocity

$$c = \sqrt{\gamma g R T_S}$$

4. Ideal Velocity (fully expanded)

$$V = M c$$

5. Calculated Ideal Thrust

$$F = V W/g$$

4.4.3 Humidity and Temperature Measurement

One of the parameters necessary for correcting acoustic data for atmospheric absorption is the humidity content of air through which the signal is propagating. Since varying nozzle operating conditions may cause changes in

the chamber environment during the course of testing, a means of remote humidity readout is required. This is accomplished through the Hygrometrix Model 8501 Relative Humidity System. This system utilizes a Xeritron sensor that is an assembly of hygromechanical crystallite structures and piezoresistive silicon strain gages on a common substrate. The sensing element responds to changes in relative humidity by a dimensional change reflected in the strain gage resistance with its resistance being proportional to the relative humidity.

Temperature at the humidity sensor location is measured using a Type K thermocouple. Readout of both temperature and relative humidity is provided at the cell control panel and is logged for each test point. Provision exists for humidity readout from any of the microphone positions; however, the sensor is mounted at the 40° microphone position, as this location represented a good approximation of mean chamber conditions as determined from the environmental survey. The manufacturer's stated accuracy for this system is $\pm 2\%$ over the range of -40°C to 1250°C .

5.0 TEST POINT DEFINITION

The following tables define the measured aerodynamic test conditions for both the laser velocimeter and the acoustic test points taken on each model.

The aerodynamic test matrix for the LV tests is shown in Table IV. The outer and inner flow aerodynamic conditions shown were obtained from on-line data since no data were taped during LV testing. In addition to the outer and inner conditions, the "mixed" conditions are also tabulated. These "mixed" conditions were calculated assuming that the outer and inner streams are perfectly mixed together. The resulting mixed velocity (V^M) and total temperature (T_T^M) are defined as:

$$V^M = \frac{V^O W^O + V^I W^I}{W^O + W^I},$$

and

$$T_T^M = \frac{T_T^O W^O + T_T^I W^I}{W^O + W^I}; \text{ see the definition of symbols following.}$$

The free jet velocity ($V_{a/c}$) was obtained directly from LV measurements at the exit plane of the scale model nozzle. The total temperatures of the inner and outer streams and the free jet were measured using the total temperatures and the pressure ratio of the flows determined through total pressure rakes. Using these measurements, the velocities of the flows were calculated using isentropic gas dynamic relations.

The aerodynamic test matrix for the acoustic tests is shown in Tables V through XII for Models 1, 1A, 2, 3, 4, 5, 6 and 7, respectively. The aerodynamic conditions were obtained from taped data. The "mixed" conditions were calculated as described above. The free jet velocity ($V_{a/c}$) was determined by subtracting the velocity reduction from the measured value. The free jet velocity reduction was caused by the model area reduction between the free jet nozzle exit station and model nozzle exit station. This free jet velocity correction method is detailed in the Final Report. In addition to the aerodynamic conditions, both model scale and scaled acoustic data are tabulated. The nominal area of the full size engine is 1400 in.². The definition of symbols used in these tables are as follows:

DEFINITION OF SYMBOLS

P_r	Measured nozzle pressure ratio
V	Ideal nozzle velocity, ft/sec
T_T	Measured nozzle total temperature, ° R
T	Ideal calculated static temperature, ° R
W	Ideal calculated weight flow, lbm/sec
o	Designates outer nozzle
i	Designates inner nozzle

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Table IV. Aerodynamic Test Matrix for Laser Velocimeter Tests.

Model	Test Point	V _{a/c} ft/sec	Outer					Inner					Mixed		
			P _r ^o	V ^o ft/sec	T _r ^o ° R	T ^o ° R	W ^o lbm/sec	P _r ⁱ	V ⁱ ft/sec	T _r ⁱ ° R	T ⁱ ° R	W ⁱ lbm/sec	V ^M ft/sec	T _r ^M ° R	V ⁱ /V ^o
1	101	0	3.17	2416	1708	1263	10.52	3.19	1636	790	567	2.16	2283	1146	0.677
	101A	0	1.00	0	592	592	0	3.21	1635	785	563	2.18	1635	563	---
	103	400	3.17	2427	1722	1274	10.47	3.19	1633	787	565	2.17	2291	1155	0.673
	113A	0	1.00	0	571	571	0	1.62	1104	784	683	1.08	1104	683	---
	116	0	2.43	2175	1735	1381	8.00	2.08	1348	801	650	1.40	2051	1276	0.620
	119A	0	2.26	2092	1733	1405	7.44	1.02	262	1013	1006	0.18	2050	1403	0.125
	1505	0	1.45	1447	1720	1567	4.53	1.45	898	666	599	1.01	1348	1393	0.621
	1506	400	1.45	1453	1733	1579	4.51	1.43	899	693	626	0.97	1355	1413	0.619
1A	101A	0	3.19	2453	1722	1272	10.54	3.22	1648	789	565	3.09	2270	1114	0.672
	116A	0	2.45	2184	1721	1366	7.96	2.20	1338	735	587	2.15	2003	1511	0.613
2	201	0	3.17	2435	1733	1283	10.44	3.24	1629	774	553	3.10	2250	1118	0.669
	203	400	3.18	2425	1716	1268	10.52	3.20	1630	782	561	3.04	2247	1112	0.672
	204	0	3.79	2551	1688	1186	12.65	3.23	1638	784	561	3.06	2372	1069	0.642
	206	400	3.76	2559	1707	1203	12.48	3.24	1635	780	557	3.08	2376	1080	0.639
	210	0	2.28	2088	1710	1384	7.56	2.09	1264	700	567	2.10	1909	1210	0.605
	212	400	2.28	2084	1704	1379	7.57	2.11	1265	693	560	2.13	1904	1203	0.607
	213	0	3.15	2430	1734	1286	10.37	1.58	1097	817	717	1.43	2268	1229	0.451
	215	400	3.18	2429	1722	1273	10.50	1.61	1104	789	696	1.49	2265	1213	0.455
	216	0	3.79	2551	1689	1187	12.65	1.59	1098	808	708	1.45	2402	1151	0.430
	219	0	2.27	2085	1713	1388	7.52	1.59	1092	800	701	1.46	1924	1283	0.524
	221	400	2.29	2089	1704	1377	7.61	1.61	1094	783	683	1.50	1925	1270	0.524
	222	0	2.42	2165	1727	1376	7.98	2.18	1324	731	585	2.14	1987	1213	0.612
	222A	0	2.45	2184	1713	1360	8.12	2.18	1334	739	591	2.13	2000	1510	0.611
3	301	0	3.17	2434	1732	1282	10.44	3.22	1634	782	560	3.10	2250	1119	0.671
	303	400	3.17	2433	1731	1281	10.44	3.21	1634	784	562	3.09	2251	1119	0.671
5	513	0	3.14	2428	1735	1288	11.67	---	---	---	---	---	2428	1288	---
	515	400	3.19	2431	1720	1270	11.90	---	---	---	---	---	2431	1270	---
6	3009R	0	2.26	2088	1726	1401	4.64	1.37	795	611	558	2.26	1664	1145	0.381
	3011	400	2.23	2070	1722	1402	4.58	1.39	796	587	534	2.37	1636	1127	0.385
	3015R	0	2.78	2292	1704	1306	5.74	1.63	1438	1317	1156	1.98	2073	1278	0.628
	3016	300	2.73	2290	1727	1332	5.60	1.63	1426	1294	1136	2.00	2063	1290	0.623
	3017	400	2.74	2293	1726	1329	5.62	1.63	1431	1303	1144	1.99	2068	1291	0.624
	3018	0	2.70	2285	1736	1343	5.52	1.96	1630	1259	1049	2.45	2082	1258	0.713
	3020	400	2.70	2281	1730	1338	5.53	1.95	1622	1255	1047	2.44	2078	1254	0.711
7	7009	0	2.25	2085	1730	1406	7.46	1.48	868	592	529	2.59	1772	1195	0.416
	7011	400	2.25	2090	1737	1412	7.45	1.48	869	593	530	2.59	1775	1199	0.416
	7015	0	2.73	2295	1735	1338	9.04	1.83	1406	1036	874	2.54	2100	1244	0.613
	7016	300	2.71	2287	1734	1340	8.98	1.83	1411	1043	881	2.53	2094	1247	0.617
	7017	400	2.70	2292	1746	1351	8.91	1.83	1410	1042	880	2.53	2097	1255	0.615
	7018	0	2.67	2269	1729	1341	8.86	2.73	1643	901	676	4.08	2072	1134	0.724
	7019	300	2.68	2267	1721	1333	8.91	2.74	1650	905	679	4.08	2073	1130	0.728
	7020	400	2.67	2274	1736	1347	8.84	2.78	1644	888	663	4.18	2071	1129	0.723

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Table V. Aerodynamic Test Matrix for Acoustic Data, Model 1.

Test Point	Outer					Inner					Mixed				
	V_a/c ft/sec	V^o ft/sec	T^o °R	P^o lbm/sec	W^o lbm/sec	V^i ft/sec	T^i °R	P^i lbm/sec	W^i lbm/sec	T^M °R	T^M °R	M lbm/sec	M lbm/sec	V^M ft/sec	V^o
101	0	2425	1721	1273	3.1684	10.5	781	3.1949	2.2	1558	1152	3.1057	12.7	0.671	0.671
102	289	2425	1723	1275	3.1625	10.5	789	3.1472	2.1	1564	1158	3.0972	12.6	0.671	0.671
103	385	2432	1733	1283	3.1610	10.5	775	3.1615	2.2	1568	1161	3.0936	12.7	0.665	0.665
104	0	2350	1695	1274	2.9779	10.0	732	2.4082	1.7	1554	1176	2.8579	11.7	0.595	0.595
105	289	2344	1693	1274	2.9630	9.9	855	2.1507	1.4	1588	1206	2.8369	11.3	0.606	0.606
106	384	2340	1687	1270	2.9620	10.0	840	2.1630	1.4	1580	1200	2.8359	11.4	0.604	0.604
107	0	1764	1605	1371	1.8412	6.3	660	1.8288	1.4	1550	1229	1.8154	7.7	0.635	0.635
108	289	1766	1488	1249	1.9453	7.0	654	1.8490	1.4	1659	1135	1.9142	8.4	0.637	0.637
109	381	1759	1473	1235	1.9491	7.0	651	1.8481	1.4	1654	1123	1.9107	8.4	0.638	0.638
110	0	2546	1684	1183	3.7832	12.7	779	3.1863	2.2	1551	1096	3.6400	14.9	0.638	0.638
111	289	2570	1715	1207	3.7826	12.6	797	3.1661	2.2	1581	1118	3.6382	14.8	0.638	0.638
112	384	2555	1697	1193	3.7796	12.7	802	3.1356	2.1	1568	1109	3.6362	14.8	0.641	0.641
113	0	2103	1738	1407	2.2759	7.5	730	2.0141	1.4	1968	1282	2.2094	8.9	0.600	0.600
114	286	2095	1724	1396	2.2762	7.5	732	2.0025	1.4	1962	1274	2.2093	8.9	0.604	0.604
115	382	2097	1728	1399	2.2759	7.5	733	2.0226	1.4	1964	1275	2.2109	8.9	0.625	0.625
116	0	2164	1715	1363	2.4353	8.1	895	2.0818	1.4	2044	1262	2.3620	9.5	0.622	0.622
117	0	2099	1678	1346	2.3454	7.9	907	1.8127	1.2	1998	1275	2.2652	9.1	0.625	0.625
118	0	2153	1732	1385	2.3866	7.9	902	1.8961	1.2	2045	1295	2.3079	9.1	0.625	0.625
119	0	2177	1677	1318	2.5252	8.5	901	1.9404	1.2	2074	1249	2.4360	9.7	0.628	0.628

AREA MODEL SIZE - INNER = 2.47 , OUTER = 10.05

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Table VI. Aerodynamic Test Matrix for Acoustic Data, Model 1A.

Test Point	V a/c ft/sec	Outer				Inner				Mixed				
		V ⁰ ft/sec	T ⁰ ° R	P ⁰ P _r	W ⁰ lbm/sec	V ¹ ft/sec	T ¹ ° R	P ¹ P _r	W ¹ lbm/sec	V ^M ft/sec	T ^M ° R	P ^M P _r	W ^M lbm/sec	V ^I /V ⁰
101A	0	2411	1678	3.2311	10.8	1636	789	3.1941	3.1	2239	1481	3.1476	13.9	0.679
103A	390	2453	1735	3.2316	10.6	1656	804	3.2183	3.1	2274	1527	3.1478	13.7	0.675
104A	0	2364	1710	2.9875	9.9	1363	738	2.2748	2.3	2178	1529	2.8109	12.2	0.577
106A	390	2369	1720	2.9807	9.9	1383	761	2.2742	2.2	2187	1543	2.8085	12.1	0.584
107A	0	1758	1464	1.9560	7.0	1139	681	1.8300	1.9	1627	1298	1.9183	8.9	0.648
108A	290	1757	1457	1.9614	7.1	1141	681	1.8342	1.9	1626	1293	1.9157	9.0	0.649
109A	390	1759	1463	1.9587	7.1	1135	677	1.8286	1.9	1626	1296	1.9120	9.0	0.645
110A	0	2564	1693	3.8372	12.8	1648	793	3.1933	3.1	2385	1519	3.6439	15.9	0.640
112A	390	2556	1689	3.8135	12.7	1637	787	3.2107	3.1	2376	1513	3.6254	15.8	0.640
113A	0	2110	1724	2.3070	7.6	1276	716	2.0843	2.1	1929	1506	2.2220	9.7	0.605
115A	390	2099	1713	2.2986	7.6	1269	728	2.0866	2.0	1923	1505	2.2120	9.6	0.605
116A	0	2177	1715	2.4655	8.2	1332	755	2.1422	2.1	2004	1518	2.3665	10.3	0.612
117A	0	2157	1729	2.4000	7.9	1325	753	2.1280	2.1	1983	1525	2.3098	10.0	0.614
118A	0	2207	1735	2.5053	8.3	1356	753	2.2151	2.2	2029	1529	2.4074	10.5	0.614
119A	0	2190	1711	2.5021	8.3	1320	721	2.1948	2.2	2007	1503	2.3986	10.5	0.603
121A	0	2426	1700	3.2266	10.7	1184	814	1.7187	1.6	2263	1584	2.9565	12.3	0.488
122A	390	2440	1716	3.2349	10.7	1186	810	1.7271	1.6	2274	1596	2.9629	12.3	0.486
123A	0	2433	1709	3.2280	10.7	678	837	1.1779	0.8	2310	1647	2.9566	11.5	0.279
124A	390	2449	1730	3.2303	10.7	681	842	1.1785	0.8	2324	1667	2.9581	11.5	0.278
125A	0	2440	1720	3.2241	12.7	1	858	1.0000	0.0	2440	1720	3.2241	12.7	0.001
126A	390	2442	1720	3.2315	12.8	1	972	1.0000	0.0	2442	1720	3.2314	12.8	0.001

AREA MODEL SIZE - INNER = 3.50 , OUTER = 18.05

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Table VII. Aerodynamic Test Matrix for Acoustic Data, Model 2.

Test Point	V a/c ft/sec	Outer				Inner				Mixed			
		T^0_T ° R	P^0_P lbm/sec	V^0_V ft/sec	T^1_T ° R	P^1_P lbm/sec	V^1_V ft/sec	T^M_T ° R	P^M_P lbm/sec	V^M_V ft/sec	T^M_T ° R	P^M_P lbm/sec	V^M_V ft/sec
201	296	1720	3.1593	10.4	793	3.2095	3.0	1511	3.0877	2246	1117	3.0877	13.4
202	296	1716	3.1876	10.5	796	3.2089	3.0	1511	3.1118	2253	1114	3.1118	13.5
203	296	1714	3.1856	10.5	801	3.2080	3.0	1511	3.1115	2253	1114	3.1115	13.5
204	295	1697	3.7785	12.5	794	3.2093	3.0	1521	3.5993	2378	1077	3.5993	15.5
205	295	1687	3.8114	12.7	791	3.2153	3.0	1514	3.6279	2378	1069	3.6279	15.7
206	396	1693	3.8080	12.6	807	3.2178	3.0	1523	3.6293	2385	1075	3.6293	15.6
207	297	1732	2.9806	9.8	740	2.2716	2.2	1534	2.8066	2186	1166	2.8066	12.0
208	297	1723	2.9803	9.8	744	2.2573	2.2	1544	2.8046	2186	1174	2.8046	12.0
209	396	1732	2.9792	9.8	745	2.2821	2.2	1549	2.8062	2191	1178	2.8062	12.0
210	297	1698	2.2892	7.6	701	2.0721	2.1	1549	2.2068	1907	1204	2.2068	9.7
211	297	1709	2.3140	7.6	736	2.0772	2.0	1549	2.2322	1938	1218	2.2322	9.6
212	396	1709	2.3161	7.7	720	2.0749	2.0	1549	2.2313	1938	1214	2.2313	9.7
213	296	1742	3.1597	10.3	833	1.5741	1.4	1633	2.8888	2278	1235	2.8888	11.7
214	296	1741	3.1834	10.4	831	1.6028	1.4	1630	2.9112	2283	1230	2.9112	11.8
215	396	1743	3.1819	10.4	824	1.6039	1.4	1630	2.9092	2282	1231	2.9092	11.8
216	296	1706	3.7759	12.5	844	1.5724	1.5	1621	3.4235	2416	1169	3.4235	13.9
217	296	1702	3.8030	12.6	814	1.6021	1.5	1610	3.4448	2413	1158	3.4448	14.1
218	396	1703	3.8089	12.6	825	1.6043	1.4	1612	3.4517	2416	1159	3.4517	14.0
219	296	1720	2.2957	7.6	798	1.6021	1.5	1569	2.1595	1938	1284	2.1595	9.1
220	296	1697	2.3089	7.7	804	1.6063	1.5	1553	2.1725	1934	1268	2.1725	9.2
221	396	1693	2.3116	7.7	789	1.6071	1.5	1553	2.1756	1936	1267	2.1756	9.2
222	296	1718	2.4449	8.1	756	2.1646	2.1	1520	2.3537	1999	1213	2.3537	10.2

AREA MODEL SIZE - INNER = 3.45 , OUTER = 18.05

Table VIII. Aerodynamic Test Matrix for Acoustic Data, Model 3.

Test Point	V_a/c ft/sec	Outer				Inner				Mixed				
		V^0 ft/sec	T^0 °R	P^0 lbm/sec	V^0 lbm/sec	T^1 °R	P^1 lbm/sec	V^1 ft/sec	T^1 °R	V^M ft/sec	T^M °R	P^M lbm/sec	V^M lbm/sec	V^1/V^0
301	0	2427	1719	1270	3.1797	1634	784	3.2114	561	2246	1586	1112	13.6	0.673
302	289	2426	1717	1268	3.1814	1628	778	3.2128	557	2244	1583	1109	13.6	0.671
303	386	2438	1724	1271	3.2062	1636	786	3.2109	563	2256	1512	1114	13.7	0.671
304	0	2554	1694	1191	3.7849	1620	775	3.1864	556	2370	1513	1071	15.7	0.634
305	289	2554	1691	1187	3.7962	1649	799	3.2084	572	2377	1517	1072	15.7	0.646
306	385	2557	1706	1202	3.7548	1640	790	3.2101	566	2375	1524	1081	15.5	0.641
307	0	2355	1715	1294	2.9474	1373	767	2.2280	562	2176	1562	1176	11.9	0.583
308	289	2374	1739	1312	2.9541	1374	751	2.2744	593	2186	1553	1184	11.9	0.579
309	385	2373	1730	1303	2.9709	1377	753	2.2779	595	2187	1548	1178	11.9	0.580
310	0	2088	1715	1388	2.2738	1248	626	2.2529	496	1883	1449	1175	9.9	0.598
311	285	2099	1711	1381	2.3011	1263	638	2.2630	505	1897	1452	1174	9.8	0.602
312	385	2099	1699	1368	2.3167	1256	692	2.0886	560	1915	1480	1197	9.8	0.598
313	0	2305	1705	1304	2.8021	466	946	1.0698	928	2210	1668	1297	10.5	0.203
314	385	2315	1726	1321	2.8036	466	906	1.0731	888	2220	1684	1311	10.5	0.201
315	0	2286	1712	1316	2.7485	946	726	1.4607	651	2109	1582	1241	10.3	0.414
316	386	2287	1726	1331	2.7247	962	689	1.4486	689	2116	1582	1261	10.3	0.421
317	0	2286	1695	1298	2.7817	1419	1067	1.8163	903	2165	1607	1249	10.7	0.621
318	377	2280	1707	1313	2.7413	1415	1064	1.8130	901	2158	1616	1261	10.6	0.621

AREA MODEL SIZE - INNER = 3.5% , OUTER = 18.0%

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Table IX. Aerodynamic Test Matrix for Acoustic Data, Model 4.

Test Point	V_a/c ft/sec	Outer			Inner					Mixed				
		T^o_T °R	T^o_T °R	P^o_T lbm/sec	V^o ft/sec	T^i_T °R	T^i_T °R	P^i_T lbm/sec	V^i ft/sec	T^M_T °R	T^M_T °R	P^M_T lbm/sec	V^M ft/sec	V^M lbm/sec
481	0	2313	1736	1332	2.7782	9.2	425	988	965	1.0556	1.1	2104	1652	1317
482	387	2285	1689	1292	2.7908	9.2	464	1026	1008	1.0636	1.2	2079	1614	1285
483	0	2313	1736	1332	2.7782	9.1	754	1000	954	1.1848	2.0	2028	1601	1289
484	387	2303	1721	1320	2.7790	9.1	742	968	923	1.1849	2.1	2015	1582	1273
485	0	2298	1730	1331	2.7476	9.0	957	746	669	1.4583	3.7	1909	1445	1162
486	387	2297	1727	1328	2.7505	9.0	965	762	684	1.4557	3.6	1915	1450	1166
487	0	2307	1727	1325	2.7787	9.2	1414	1312	1156	1.6840	3.2	2078	1620	1293
488	387	2311	1728	1324	2.7801	9.1	1425	1313	1155	1.6160	3.2	2083	1621	1291
489	0	2318	1742	1337	2.7808	9.1	1626	1258	1049	1.9534	4.0	2107	1594	1255
490	387	2319	1734	1328	2.7992	9.1	1625	1257	1048	1.9528	4.0	2108	1589	1249

AREA MODEL SIZE - INNER = 9.56 ; OUTER = 18.05

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Table X. Aerodynamic Test Matrix for Acoustic Data, Model 5.

Test Point	Outer				Inner				Mixed			
	V_a/c ft/sec	V^0 ft/sec	T^0 °R	P^0 lbm/sec	V^0 lbm/sec	T^1 °R	P^1 lbm/sec	V^1 lbm/sec	T^M °R	T^M °R	P^M lbm/sec	V^M lbm/sec
501	0	2270	1690	2.7460	10.3	522	1.0000	0.0	1690	1299	2.7460	10.3
502	278	2279	1307	2.7463	10.3	522	1.0000	0.0	1700	1307	2.7463	10.3
503	370	2279	1305	2.7539	10.3	522	1.0000	0.0	1699	1305	2.7539	10.3
504	0	2171	1676	2.5119	9.5	522	1.0000	0.0	1676	1319	2.5120	9.5
505	278	2170	1668	2.5224	9.5	522	1.0000	0.0	1668	1311	2.5225	9.5
506	370	2180	1676	2.5339	9.6	522	1.0000	0.0	1676	1316	2.5339	9.6
507	0	1605	1075	2.1753	10.4	522	1.0000	0.0	1075	864	2.1754	10.4
508	278	1610	1072	2.1927	10.5	522	1.0000	0.0	1072	859	2.1927	10.5
509	370	1606	1062	2.2016	10.6	522	1.0000	0.0	1062	850	2.2015	10.6
510	0	2368	1305	2.9551	11.0	522	1.0000	0.0	1305	1345	2.9552	11.0
511	278	2363	1303	2.9482	11.0	522	1.0000	0.0	1303	1303	2.9482	11.0
512	370	2364	1298	2.9603	11.0	522	1.0000	0.0	1298	1298	2.9603	11.0
513	0	2411	1701	3.1694	11.9	522	1.0000	0.0	1701	1257	3.1694	11.9
514	278	2416	1258	3.1795	11.9	522	1.0000	0.0	1258	1258	3.1796	11.9
515	370	2422	1261	3.1879	11.9	522	1.0000	0.0	1261	1261	3.1880	11.9
516	0	2546	1676	3.8144	14.4	522	1.0000	0.0	1676	1174	3.8144	14.4
517	278	2550	1688	3.7882	14.2	522	1.0000	0.0	1688	1186	3.7880	14.2
518	370	2550	1680	3.8186	14.4	522	1.0000	0.0	1680	1177	3.8187	14.4
519	0	1219	1093	1.5210	6.9	522	1.0000	0.0	1093	973	1.5210	6.9
520	278	1213	1087	1.5181	6.9	522	1.0000	0.0	1087	969	1.5181	6.9
521	370	1210	1087	1.5148	6.9	522	1.0000	0.0	1087	969	1.5148	6.9

AREA MODEL SIZE - INNER = 0.00 , OUTER = 20.38

Table XI. Areodynamic Test Matrix for Acoustic Data, Model 6.

Test Point	V a/c ft/sec	Outer				Inner				Mixed			
		V ^o ft/sec	T ^o ° R	P ^o lbm/sec	W ^o lbm/sec	V ⁱ ft/sec	T ⁱ ° R	P ⁱ lbm/sec	W ⁱ lbm/sec	V ^M ft/sec	T ^M ° R	P ^M lbm/sec	W ^M lbm/sec
3001	0	2422	1699	3.2146	6.6	1615	761	3.2400	5.3	2064	1283	3.0837	11.9
3002	388	2440	1730	3.1977	6.5	1638	778	3.2683	5.2	2082	1305	3.0824	11.7
3003	0	2084	1685	2.3039	4.8	1241	676	2.0875	3.6	1721	1250	2.1480	8.4
3004	302	2441	1732	3.1969	6.5	1647	789	3.2541	5.2	2088	1313	3.0814	11.7
3005	384	2092	1707	2.2919	4.7	1242	685	2.0679	3.6	1726	1267	2.1345	8.3
3006	0	2316	1741	2.7770	5.7	371	637	1.0656	0.9	2038	1583	2.3470	6.6
3007	299	2312	1734	2.7793	5.7	271	681	1.0321	0.6	2106	1627	2.4337	6.3
3008	388	2302	1711	2.7959	5.7	272	709	1.0310	0.6	2106	1614	2.4549	6.3
3009	0	2098	1721	2.2864	4.7	792	604	1.3722	2.3	1671	1355	1.9232	7.0
3010	299	2104	1733	2.2834	4.7	792	625	1.3571	2.2	1684	1378	1.9216	6.9
3011	388	2106	1735	2.2850	4.7	783	689	1.3584	2.2	1678	1371	1.9198	6.9
3012	0	2274	1694	2.7495	5.7	935	747	1.4315	2.2	1908	1429	2.2685	7.9
3013	298	2291	1716	2.7548	5.7	949	719	1.4702	2.3	1898	1424	2.2726	8.0
3014	384	2279	1697	2.7578	5.7	943	726	1.4570	2.3	1895	1418	2.2748	8.0
3015	0	2286	1694	2.7837	5.8	1409	1290	1.6122	2.0	2062	1591	2.3893	7.8
3016	298	2307	1722	2.7885	5.7	1420	1299	1.6192	2.0	2079	1613	2.3942	7.7
3017	389	2314	1726	2.8007	5.7	1423	1309	1.6163	1.9	2087	1619	2.4020	7.6
3018	0	2276	1697	2.7493	5.6	1616	1263	1.9532	2.5	2075	1559	2.4710	8.1
3019	301	2301	1727	2.7617	5.6	1634	1257	1.9688	2.5	2097	1583	2.4840	8.1
3020	389	2322	1761	2.7558	5.6	1622	1237	1.9712	2.5	2105	1598	2.4778	8.1

AREA MODEL SIZE - INNER = 5.85 , OUTER = 11.22

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Table XII. Aerodynamic Test Matrix for Acoustic Data, Model 7.

Test Point	Outer				Inner				Mixed			
	V_a/c ft/sec	V^o ft/sec	T^o °R	P^o lbm/sec	V^o lbm/sec	T^i °R	P^i lbm/sec	V^i ft/sec	T^M °R	P^M lbm/sec	V^M ft/sec	$V^{i/o}$
7001	0	2431	1741	1292	3.1377	815	3.0478	4.8	1447	3.0180	2178	0.672
7002	386	2437	1741	1290	3.1587	779	3.2017	5.1	1422	3.0543	2168	0.668
7003	0	2109	1742	1410	2.2823	679	2.0637	3.5	1828	2.1578	1828	0.586
7004	294	2429	1730	1281	3.1585	776	3.2188	5.2	1412	3.0584	2162	0.670
7005	386	2093	1707	1378	2.2940	683	2.0674	3.6	1821	2.1709	1821	0.592
7006	0	2320	1736	1329	2.7982	696	1.0087	0.3	1700	2.6592	2245	0.062
7007	298	2306	1714	1311	2.8015	669	1.0956	1.1	1686	2.4826	2112	0.200
7008	386	2301	1705	1303	2.8050	713	1.0919	1.1	1684	2.4916	2114	0.200
7009	0	2076	1715	1392	2.2500	684	1.4622	2.5	1769	2.0069	1934	0.416
7010	294	2096	1717	1388	2.2874	571	1.5147	2.7	1772	2.0356	1772	0.418
7011	388	2104	1731	1400	2.2859	574	1.4919	2.6	1779	2.0308	1779	0.410
7012	0	2287	1721	1326	2.7341	711	1.4605	2.3	1514	2.3888	2011	0.409
7013	293	2275	1701	1309	2.7388	743	1.4476	2.2	1511	2.3974	2012	0.416
7014	385	2283	1713	1319	2.7382	738	1.4486	2.2	1519	2.3952	2017	0.413
7015	0	2290	1734	1338	2.7181	1039	1.8096	2.5	1581	2.4789	2094	0.610
7016	294	2291	1726	1330	2.7357	891	1.8138	2.5	1589	2.4950	2099	0.615
7017	386	2291	1724	1327	2.7395	898	1.8242	2.5	1582	2.5009	2102	0.620
7018	0	2290	1745	1350	2.6979	910	1.7324	4.0	1589	2.6492	2089	0.721
7019	294	2273	1713	1322	2.7106	981	2.7216	4.1	1576	2.6577	2076	0.722
7020	388	2281	1729	1336	2.7028	985	2.7307	4.1	1582	2.6532	2082	0.722
7101	0	2076	1523	1190	2.5347	845	1.7316	2.6	1878	2.3160	1900	0.585
7102	387	2080	1517	1182	2.5561	856	1.7234	2.6	1885	2.3319	1885	0.585
7103	0	2100	1532	1192	2.5812	1065	2.5709	3.5	1999	2.5618	1987	0.829
7104	386	2079	1515	1181	2.5572	1097	2.4980	3.4	1987	2.5300	1991	0.838
7105	0	1710	1428	1202	1.9140	654	1.2083	1.6	1506	1.7439	1102	0.376
7106	386	1694	1404	1182	1.9119	680	1.2203	1.6	1502	1.7466	1093	0.401
7107	0	1691	1396	1174	1.9149	954	1.7772	2.6	1591	1.8736	1079	0.779
7108	386	1688	1395	1174	1.9111	985	1.7611	2.5	1589	1.8669	1082	0.780
7109	0	2454	1671	1207	3.4196	639	1.3794	2.2	1503	2.9070	1130	0.335
7110	389	2479	1668	1194	3.5346	591	1.5025	2.6	1471	2.9854	1096	0.356
7111	0	2481	1672	1197	3.5300	591	2.5138	3.6	1505	3.2420	1096	0.659
7112	387	2486	1678	1202	3.5318	743	2.5691	3.7	1508	3.2563	1099	0.659
7113	0	2478	1670	1196	3.5237	848	3.6334	4.6	1543	3.5256	1100	0.859
7114	387	2481	1666	1191	3.5500	1217	3.6151	4.6	1506	3.5407	1096	0.855
7201	0	2284	1658	1260	2.8524	1003	3.0253	3.6	1575	2.8878	1189	0.924
7202	148	2300	1653	1248	2.9129	996	3.0762	3.7	1571	2.9457	1179	0.922
7203	326	2282	1651	1253	2.8614	1357	3.0642	3.7	1569	2.9050	1183	0.929
7204	387	2294	1674	1273	2.8484	1355	2.9970	3.6	1566	2.8773	1199	0.915
7205	0	2385	1702	1268	3.0761	1093	2.2712	2.9	1566	2.8683	1200	0.724
7206	148	2383	1693	1259	3.0916	1153	2.2942	3.0	1570	2.8838	1186	0.719

AREA MODEL SIZE - INNER = 5.81 , OUTER = 18.05

Table XII. Aerodynamic Test Matrix for Acoustic Data, Model 7 (Concluded).

Test Point	V _a /c ft/sec	Outer				Inner				Mixed			
		V ⁰ ft/sec	T ⁰ ° R	P ⁰ ° R	V ⁰ lbm/sec	T ¹ ° R	T ¹ ° R	P ¹ ° R	V ¹ lbm/sec	M _T ° R	T _T ° R	P _T ° R	V ^T lbm/sec
7207	299	2384	1696	1262	3.0875	10.3	1178	932	2.3222	1578	1192	2.8888	13.3
7208	386	2377	1684	1252	3.0934	10.4	1186	939	2.3176	1572	1186	2.8933	13.4
7209	151	2481	1740	1271	3.3226	11.8	811	724	1.4872	1582	1198	2.8635	13.0
7210	298	2487	1737	1265	3.3543	10.9	812	724	1.4958	1580	1196	2.8693	13.2
7211	298	2498	1741	1268	3.3545	10.9	812	724	1.4913	1584	1196	2.8688	13.1
7212	389	2472	1722	1253	3.3586	11.0	813	725	1.4893	1569	1184	2.8937	13.2
7301	386	1993	1615	1314	2.2096	7.5	1089	866	2.2564	1186	1186	2.2067	10.5
7302	386	2005	1643	1340	2.1988	7.5	1089	870	2.2168	1483	1206	2.1881	10.5
7303	386	2093	1628	1301	2.3651	8.0	904	767	1.7759	1449	1175	2.1973	10.6
7304	386	2093	1647	1315	2.3753	8.0	911	770	1.7987	1463	1186	2.2095	10.7
7305	386	2196	1700	1335	2.5341	8.4	596	564	1.2123	1511	1226	2.2896	10.1
7306	386	2193	1682	1318	2.5562	8.5	565	534	1.2181	1487	1204	2.2219	10.3
7402	148	2479	1654	1190	3.5488	11.9	594	532	1.4625	1476	1099	2.9958	14.4
7403	386	2487	1675	1198	3.5460	11.9	572	515	1.4486	1481	1104	2.9854	14.4
7406	148	2478	1662	1188	3.5593	12.0	974	744	2.4989	1593	1086	3.2561	15.6
7407	384	2474	1655	1182	3.5565	12.0	1226	850	3.6631	1544	1090	3.5223	16.6
7410	148	2483	1669	1193	3.5487	11.9	1223	849	3.6452	1541	1096	3.5381	16.7
7411	327	2488	1665	1190	3.5498	12.0	825	675	2.0175	1480	826	2.7969	15.6
7501	386	1968	1178	860	3.0528	12.4	849	694	2.0167	1113	831	2.8888	15.5
7502	386	1734	1189	861	3.0664	12.4	832	680	2.0286	1450	1203	2.8292	9.9
7503	386	1996	1734	1438	2.0833	6.8	845	690	2.0288	1455	1205	2.8441	10.0
7504	386	2004	1732	1433	2.0989	6.9	878	514	1.5022	1300	1181	1.4361	7.2
7505	387	1471	1716	1558	1.4702	4.6	881	503	1.5260	1286	1165	1.4503	7.3
7506	387	2322	1686	1275	2.9083	9.6	791	624	2.2838	1442	1105	2.6989	13.2
7602	387	2321	1677	1266	2.9251	9.8	810	637	2.3074	1442	1103	2.7133	13.4
7603	387	2279	1674	1281	2.7997	9.3	893	677	2.6363	1443	1105	2.7069	13.2
7604	387	2254	1541	1253	2.7984	9.5	893	680	2.5895	1423	1089	2.6900	13.4
7605	387	2240	1672	1291	2.6970	9.3	957	705	2.9020	1445	1106	2.7824	13.2
7606	387	2228	1660	1282	2.6867	9.1	985	726	2.9092	1447	1108	2.7017	13.3
7607	387	2398	1707	1269	3.1083	10.3	539	539	1.6048	1471	1131	2.6714	13.1
7608	386	2397	1707	1269	3.1049	10.2	567	489	1.6786	1441	1108	2.6624	13.3
7609	387	2392	1700	1263	3.1051	10.2	915	576	2.8747	1470	1095	2.9869	14.4
7610	298	2425	1732	1285	3.1394	10.3	934	688	2.9020	1499	1114	3.0184	14.5
7611	387	2411	1713	1270	3.1385	10.3	926	684	2.8825	1487	1108	3.0141	14.5
7612	298	2460	1744	1284	3.2333	10.5	816	622	2.5837	1482	1102	3.0106	14.7
7613	387	2452	1723	1267	3.2549	10.7	830	634	2.5654	1482	1102	3.0101	14.7
7614	387	2450	1725	1265	3.2529	10.7	834	637	2.5629	1482	1102	3.0101	14.7
7615	298	2585	1770	1293	3.3303	10.8	757	602	2.2250	1516	1132	2.9759	14.4
7616	298	2466	1734	1262	3.3590	11.0	751	595	2.2561	1487	1107	3.0061	14.7
7617	387	2492	1742	1269	3.3594	11.0	752	595	2.2655	1493	1111	3.0074	14.7
7618	387	2360	1691	1266	3.0188	10.0	1004	725	3.1125	1482	1104	2.9941	14.4
7619	294	2362	1693	1268	3.0207	10.1	990	714	3.1309	1477	1099	2.9969	14.6
7620	387	2381	1722	1291	3.0150	10.0	1001	721	3.1482	1499	1117	2.9956	14.5

6.0 TEST RESULTS

6.1 ACOUSTIC TEST RESULTS

In this section, the measured acoustic far field data are presented for each test point defined in Section 5. The acoustic far field data consist of 1/3 octave band sound pressure levels at angles to the inlet from 40° through 160° in 10° increments. The power level spectra are also presented along with the calculated OASPL and PNL at each angular location. Three different tabulations of the acoustic far field data are presented for each test point. The first table shows the "Untransformed Model Sound Pressure Levels" (i.e., as-measured SPL data) on a 40 ft arc. Only the data above the anechoic chamber cutoff frequency of 250 Hz are shown. The second table shows the "Flight Transformed Model Sound Pressure Levels". Both the refraction and turbulence corrections are employed in the flight transformation. The third table shows the "Flight Transformed, Scaled, and Extrapolated Sound Pressure Levels" for a nozzle of area 1400 in.² at a 2400 ft sideline. In addition to the OASPL, the PNL, and PNLT (i.e., tone corrected PNL) are shown.

A detailed description of the three types of tabulations is presented in Tables XIII through XV with all the key parameters identified. These tables are self-explanatory. The acoustic test results are presented in Sections 6.1.1 through 6.1.8 for Models, 1, 1A, 2, 3, 4, 5, 6, and 7, respectively.

The measured SPL data is corrected to standard day conditions (i.e., $T_{amb} = 59^{\circ} \text{ F}$ and relative humidity = 70%) from the actual ambient temperature and relative humidity conditions of the anechoic chamber by applying the Bass and Shields air attenuation model.

Table XIII. Sample Data Sheet.

UNTRANSMISSION MODEL SOUND PRESSURE LEVELS
69.0 DEG. F., 70 PERCENT R.H. STD. DAY, 53 40.0 FT. ARC

IDENTIFICATION -- FJ-ZERRFMOOL X01010

1/3 Octave Band
Sound Power Level
Ref: 10-13 Watts

ANGLES MEASURED FROM INLET, DEGREES
45. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160.

"As Measured" SPL Data Corrected Only for Electronic Corrections,
R² Correction From Measured Position to 40' arc and Atmospheric
Attenuation From Actual Conditions to 59° F, 70% RH Day Using
Bass and Shields Correction.

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Ambient Pressure,
Inches of Mercury

Air Attenuation Model (Commonly 'SB59' Shields
and Bass at 59° F)

Aero Reading
Number

TAMB --- Ambient Temperature, ° F
RELHUM --- Relative Humidity, Percent

Cell 41, Anechoic
Chamber

TAPE NO. N291
AERO. RDG.

TEST DATE 02-07-78
LOCATION C41 ANECH CH

verall
ound Pressure
evel

SIZE--Total Flow Area, in.² FREE-JET SPEED, FPS

ACOUSTIC RANGE, Feet

TEST POINT

MODEL

Table XIV. Sample Data Sheet.

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS														
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC														
IDENTIFICATION - FJ-ZERRFNCDL X01019														
1/3 Octave Band Frequency		ANGLES MEASURED FROM INLET, DEGREES										1/3 Octave Band Sound Power Level, Ref 10 ⁻¹³ Watts		
40.	50.	60.	70.	80.	90.	100.	110.	120.	130.	140.	150.	160.		
50	63	80	100	125	160	200	250	315	400	500	630	800		
1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	10000	12500	16000		
20000	25000	31500	40000	50000	63000	80000	100000	125000	160000	200000	250000	315000		
400000	500000	630000	800000	1000000	1250000	1600000	2000000	2500000	3150000	4000000	5000000	6300000		
"As Measured" SPL Data in a Free Jet Environment Transformed Through the Flight Transformation Procedure for a True Flight Situation.														
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GASPL - Overall Sound Pressure Level														
MODEL/FULL SIZE SCALE FACTOR INPUT		FREE JET VELOCITY (FT/SEC) CALC.		FREE JET DIAMETER (IN)		Size of the Free Jet Nozzle		REFRACTION CORRECTION - YES		TURBULANCE CORRECTION - YES		For Flight Transformation		
Model Flow Area for Flight Transformed Data		TAPE NO. N291		AERO. ROG. ADH041		IALPHA SB59		PAM3 29.6936		TAMB 16.66		RELHUM 43.40		
TEST DATE 02-07-78		LOCATION C41 ANECH CH		AERO. ROG. ADH041		IALPHA SB59		PAM3 29.6936		TAMB 16.66		RELHUM 43.40		
MODEL TEST POINT		ACOUSTIC RANGE		SIZE		FREE-JET SPEED								

Table XV. Sample Data Sheet.

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
89.0 DEG. F., 70 PERCENT R.H. STD. DAY, SG 2400.0 FT. SL

IDENTIFICATION = FJ-ZERRFMDL X01016

Sound Power (1/3 Octave Band)
 Level
 Ref: 10-13 Watts

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160.

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

10000000

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Flight Transformed Model Data Scaled to a Full Size
 Engine Using Diameter Ratio and Frequency Shift
 Mentioned Below and Extrapolated to 2400 Feet Side-
 line Distance.

$$\text{Diameter Ratio} = \sqrt{\frac{\text{Area of Full Size Engine}}{\text{Area of Model}}}$$

$$\text{Frequency Shift} = 10 \log_{10} X \left[\frac{1}{\text{Diameter Ratio}} \right] \text{ Rounded Off to Nearest Integer}$$

Frequency Shift Indicates the Number of 1/3 Octave Bands
 the Frequency is Shifted Due to Scaling Procedure.

Overall Sound Pressure Level
 Perceived Noise Level
 Tone Corrected Perceived Noise Level

DIAMETER RATIO 8.260 FREQUENCY SHIFT -9

TEST DATE 02-07-78 TAPE NO. N291 IALPHA S859 TAMS 16.00
 LOCATION C41 ANECH CH AERO. RDG. ADH041 PAFS 29.6936 RELHUM 43.40

FREE-JET SPEED

SIZE

ACOUSTIC RANGE

TEST POINT

6.1.1 Measured Acoustic Data for Model 1

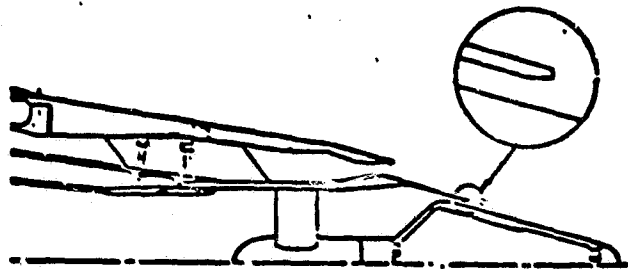
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$R_r^o = 0.853$ C-D outer nozzle

$R_r^i = 0.953$ C-D inner nozzle

$A^i/A^o = 0.137$

with struts in outer flow



07/19/79 18.690

- UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZERFMDL X01010
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

FREQ

50

63

80

100

125

160

200

250 87.8 92.1 91.1 91.4 91.7 94.3 96.5 98.9 103.6 106.9 113.8 116.7 117.4 150.2
315 88.9 90.7 91.4 91.7 93.6 95.7 96.3 98.5 105.4 111.5 115.9 118.3 117.0 151.6
400 90.4 91.9 92.7 92.5 93.8 96.0 96.8 99.5 107.2 115.0 118.4 119.6 117.0 153.4
500 92.0 92.0 94.5 94.1 94.7 97.5 98.4 100.8 109.0 116.9 120.8 121.2 117.3 155.1
630 93.1 94.9 95.7 95.4 96.5 98.9 99.5 103.4 111.4 118.0 121.4 120.8 118.2 155.7
800 97.9 98.9 99.9 97.2 97.8 99.9 101.1 104.7 112.7 119.0 122.9 121.6 118.0 156.8
1000 101.7 101.8 101.6 100.1 99.9 101.8 102.7 106.1 114.1 119.1 122.8 120.9 117.1 156.7
1250 100.9 103.4 103.2 101.7 103.0 104.2 104.5 107.7 114.3 118.8 124.1 120.3 114.9 157.2
1600 110.0 105.3 103.6 101.4 101.9 103.1 104.7 107.9 115.2 119.2 123.4 118.1 113.6 156.7
2000 110.1 109.4 107.9 105.7 102.3 103.1 104.5 108.4 115.8 120.3 121.2 116.2 111.4 156.2
2500 106.8 108.8 109.1 109.1 107.2 105.0 105.9 109.1 115.5 121.0 119.1 115.3 110.1 156.0
3150 107.0 108.1 107.9 107.9 104.2 108.8 106.9 109.9 115.8 120.2 118.1 113.8 109.3 155.5
4000 106.1 105.6 106.6 106.1 106.7 109.3 108.2 109.6 114.8 119.0 116.7 111.9 107.4 154.5
5000 104.9 105.2 106.0 106.0 106.0 107.6 109.3 111.2 114.6 117.9 116.0 110.9 107.2 154.1
6300 103.3 104.4 105.7 104.9 105.9 108.3 108.2 111.2 114.3 116.8 114.4 109.4 106.1 153.5
8000 102.7 104.0 104.9 105.0 105.3 107.2 107.8 110.9 113.8 115.4 113.0 107.9 106.0 153.0
10000 100.5 103.1 104.5 104.1 105.7 107.4 106.8 110.3 112.1 114.6 111.6 107.7 104.1 152.7
12500 99.1 101.4 101.8 102.9 104.7 105.9 105.1 107.9 109.8 112.0 109.5 105.6 102.8 151.3
16000 96.0 99.2 101.3 101.9 104.1 105.1 103.6 106.4 107.6 110.5 106.9 103.8 101.2 151.1
20000 96.8 98.8 97.3 99.0 102.3 103.6 100.8 103.3 104.4 106.8 103.6 100.6 99.7 149.9
25000 89.3 92.3 94.9 96.0 99.4 100.5 97.3 98.0 101.9 101.9 99.5 97.0 97.6 148.5
31500 87.1 88.1 92.6 93.5 94.1 94.3 93.8 95.3 97.4 99.9 96.3 91.3 90.9 147.9
40000 82.1 83.0 86.5 87.6 91.8 92.5 88.1 90.1 92.5 94.6 91.4 86.8 86.5 147.5
50000 74.6 76.6 79.3 81.6 83.8 84.8 83.2 88.1 89.1 85.4 81.5 80.7 145.7
63000 69.0 70.6 72.5 75.4 75.3 76.5 77.5 77.3 84.4 82.8 78.9 75.7 75.5 145.2
80000 63.2 64.6 68.1 70.9 69.6 71.8 70.1 72.2 73.8 76.0 74.0 68.3 67.3 145.2

0A3PL 117.0 116.9 117.0 116.6 117.1 118.1 118.0 120.9 126.0 130.4 132.3 130.2 127.0 167.8

TEST DATE 02-07-78 - TAPE NO. N291 ALPHA SD59 TAMB 16.88
LOCATION C41 AUECH CH AERO. RDG. ADH041 PAMB 29.6938 RELHUM 43.40

MODEL TEST POINT 0101 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 132.4 SQ CM (20.52 SQ IN) - MODEL 0. FREE-JET SPEED 0. FPS

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OF POOR QUALITY

07/19/79 18.690

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZERRFMDL X01010

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 87.8 | 92.1 | 91.1 | 91.4 | 91.7 | 94.3 | 96.5 | 98.9 | 103.6 | 108.9 | 113.8 | 116.7 | 117.4 | 150.2 |
| 315 | 88.9 | 90.7 | 91.4 | 91.7 | 93.6 | 95.7 | 96.3 | 98.5 | 105.4 | 111.5 | 115.9 | 118.3 | 117.0 | 151.6 |
| 400 | 90.4 | 91.9 | 92.7 | 92.5 | 93.8 | 96.0 | 96.8 | 99.5 | 107.2 | 115.0 | 118.4 | 119.6 | 117.0 | 153.4 |
| 500 | 92.0 | 93.0 | 94.5 | 94.1 | 94.7 | 97.5 | 98.4 | 100.8 | 109.0 | 116.9 | 120.8 | 121.2 | 117.3 | 155.1 |
| 630 | 93.1 | 94.9 | 95.7 | 95.4 | 96.5 | 98.9 | 99.5 | 103.4 | 111.4 | 118.0 | 121.4 | 120.8 | 118.2 | 155.7 |
| 800 | 97.9 | 95.9 | 96.9 | 97.2 | 97.8 | 99.9 | 101.1 | 104.7 | 112.7 | 119.0 | 122.9 | 121.6 | 118.0 | 156.8 |
| 1000 | 101.7 | 101.8 | 101.6 | 100.1 | 99.9 | 101.8 | 102.7 | 106.1 | 114.1 | 119.1 | 122.8 | 120.9 | 117.1 | 156.7 |
| 1250 | 100.9 | 103.4 | 103.2 | 101.7 | 103.0 | 104.2 | 104.5 | 107.7 | 114.3 | 118.8 | 124.1 | 120.3 | 114.9 | 157.2 |
| 1500 | 110.0 | 105.3 | 103.6 | 101.4 | 101.9 | 103.1 | 104.7 | 107.9 | 115.2 | 119.2 | 123.4 | 118.1 | 113.6 | 156.7 |
| 2000 | 110.1 | 109.4 | 107.9 | 105.7 | 102.3 | 103.1 | 104.5 | 108.4 | 115.8 | 120.3 | 121.2 | 116.2 | 111.4 | 156.2 |
| 2500 | 108.8 | 108.8 | 109.1 | 109.1 | 107.2 | 105.0 | 105.9 | 109.1 | 115.5 | 121.0 | 119.1 | 115.3 | 110.1 | 156.0 |
| 3150 | 107.0 | 108.1 | 107.9 | 107.9 | 109.2 | 108.8 | 106.9 | 109.9 | 115.8 | 120.2 | 118.1 | 113.8 | 109.3 | 155.5 |
| 4000 | 106.1 | 105.6 | 106.6 | 106.1 | 106.7 | 109.3 | 108.2 | 109.6 | 114.8 | 119.0 | 116.7 | 111.9 | 107.4 | 154.5 |
| 5000 | 104.9 | 105.2 | 106.0 | 106.0 | 106.0 | 107.6 | 109.3 | 111.2 | 114.6 | 117.9 | 116.0 | 110.9 | 107.2 | 154.1 |
| 6300 | 103.3 | 104.4 | 105.7 | 104.9 | 105.9 | 108.3 | 108.2 | 111.2 | 114.3 | 116.8 | 114.4 | 109.4 | 106.1 | 153.5 |
| 8000 | 102.7 | 104.0 | 104.9 | 105.0 | 106.3 | 107.2 | 107.8 | 110.9 | 113.8 | 115.4 | 113.0 | 107.9 | 106.0 | 153.0 |
| 10000 | 100.5 | 103.1 | 104.5 | 104.1 | 105.7 | 107.4 | 106.8 | 110.3 | 112.1 | 114.6 | 111.8 | 107.7 | 104.1 | 152.7 |
| 12500 | 98.1 | 101.4 | 101.8 | 102.9 | 104.7 | 105.9 | 105.1 | 107.9 | 109.8 | 112.0 | 109.5 | 105.6 | 102.8 | 151.3 |
| 16000 | 96.0 | 99.2 | 101.3 | 101.9 | 104.1 | 105.1 | 103.8 | 106.4 | 107.6 | 110.5 | 106.9 | 103.8 | 101.2 | 151.1 |
| 20000 | 90.8 | 95.8 | 97.3 | 99.0 | 102.3 | 103.6 | 100.8 | 103.3 | 104.4 | 106.8 | 103.6 | 100.6 | 99.7 | 149.9 |
| 25000 | 83.3 | 92.3 | 94.9 | 95.0 | 99.4 | 100.5 | 97.3 | 98.0 | 101.9 | 101.9 | 99.5 | 97.0 | 97.6 | 148.5 |
| 31500 | 87.1 | 88.1 | 92.6 | 93.5 | 94.1 | 94.3 | 93.8 | 95.3 | 97.4 | 99.9 | 96.3 | 91.3 | 90.9 | 147.9 |
| 40000 | 82.1 | 83.8 | 85.5 | 87.8 | 91.8 | 92.5 | 88.1 | 90.1 | 92.5 | 94.6 | 91.4 | 86.8 | 86.5 | 147.5 |
| 50000 | 74.6 | 76.6 | 79.3 | 81.6 | 83.8 | 84.8 | 83.2 | 83.2 | 83.2 | 83.1 | 89.1 | 85.4 | 80.7 | 145.7 |
| 63000 | 69.0 | 70.6 | 73.5 | 75.4 | 75.3 | 76.5 | 77.5 | 77.3 | 84.4 | 82.8 | 78.9 | 75.7 | 75.5 | 145.2 |
| 80000 | 63.2 | 64.6 | 68.1 | 70.9 | 69.6 | 71.8 | 70.1 | 72.2 | 78.8 | 76.0 | 74.0 | 68.3 | 67.3 | 146.2 |
| OASPL | 117.0 | 116.9 | 117.0 | 116.6 | 117.1 | 118.1 | 118.0 | 120.9 | 126.0 | 130.4 | 132.3 | 130.2 | 127.0 | 167.8 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | FREE JET DIAMETER (IN) | 0. | REFRACTION CORRECTION - YES | TURBULANCE CORRECTION - YES |
|------------------------------|----------------------------|------------------------|-------|-----------------------------|-----------------------------|
| INPUT 1.000 CALC 1.000 | | | 48.00 | | |

| TEST DATE | 02-07-78 | TAPE NO. | N291 | ALPHA | SB59 | TAMB | 16.88 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH041 | PAMB | 29.6938 | RELHUM | 43.40 |

| MODEL | TEST POINT | ACUSTIC RANGE | ARC | 132.4 SQ CM | SIZE | 20.52 SQ IN | MODEL | 0. | FREE-JET SPEED | M/SEC | 0. | FPS |
|-------|------------|---------------|---------|-------------|------|-------------|-------|----|----------------|-------|----|-----|
| O100 | O101 | 12.2 M | 40.0 FT | | | | | | | | | |

07/19/79 18.690

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZERRFMDL X01015

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|------|------|-------|
| 50 | 69.3 | 72.4 | 74.2 | 74.7 | 76.5 | 78.7 | 79.5 | 81.7 | 88.7 | 95.5 | 97.3 | 96.3 | 90.4 | 171.7 |
| 53 | 70.9 | 73.4 | 76.0 | 76.3 | 77.3 | 80.3 | 81.0 | 83.0 | 90.5 | 97.3 | 99.6 | 97.8 | 90.6 | 173.5 |
| 80 | 71.9 | 75.3 | 77.1 | 77.6 | 79.1 | 81.6 | 82.1 | 85.6 | 92.9 | 98.3 | 100.2 | 97.4 | 91.4 | 174.0 |
| 100 | 76.6 | 76.2 | 78.3 | 79.3 | 80.4 | 82.6 | 83.6 | 86.8 | 94.1 | 99.3 | 101.6 | 98.1 | 91.0 | 175.1 |
| 125 | 80.4 | 82.0 | 82.9 | 82.1 | 82.4 | 84.4 | 85.1 | 88.1 | 95.4 | 99.3 | 101.4 | 97.3 | 89.9 | 175.1 |
| 160 | 79.3 | 83.5 | 84.3 | 83.6 | 85.4 | 86.6 | 86.9 | 89.6 | 95.5 | 98.8 | 102.6 | 96.4 | 87.4 | 175.5 |
| 200 | 88.1 | 85.2 | 84.6 | 83.1 | 84.1 | 85.4 | 86.9 | 89.6 | 96.2 | 99.0 | 101.6 | 93.9 | 85.6 | 175.1 |
| 250 | 88.0 | 89.0 | 88.7 | 87.2 | 84.3 | 85.3 | 86.5 | 90.0 | 96.6 | 99.9 | 99.1 | 91.5 | 82.8 | 174.5 |
| 315 | 86.2 | 88.0 | 89.5 | 90.4 | 88.9 | 86.9 | 87.6 | 90.4 | 95.9 | 100.2 | 96.6 | 90.1 | 80.6 | 174.3 |
| 400 | 84.0 | 86.9 | 88.0 | 88.8 | 90.6 | 90.4 | 88.3 | 90.8 | 95.9 | 99.0 | 95.1 | 88.0 | 78.8 | 173.9 |
| 500 | 82.5 | 84.1 | 86.4 | 86.8 | 87.9 | 90.6 | 89.3 | 90.3 | 94.6 | 97.5 | 93.1 | 85.3 | 75.9 | 172.8 |
| 630 | 80.8 | 83.2 | 85.4 | 86.3 | 86.9 | 88.7 | 90.1 | 91.6 | 94.1 | 95.9 | 92.0 | 83.7 | 74.6 | 172.4 |
| 800 | 78.8 | 82.1 | 84.8 | 85.0 | 86.6 | 89.1 | 88.9 | 91.3 | 93.5 | 94.4 | 89.8 | 81.5 | 72.5 | 171.8 |
| 1000 | 77.7 | 81.4 | 83.8 | 84.9 | 86.8 | 87.9 | 88.3 | 90.8 | 92.7 | 92.8 | 88.0 | 79.4 | 71.1 | 171.3 |
| 1250 | 75.1 | 80.1 | 83.2 | 83.9 | 86.1 | 87.9 | 87.1 | 90.1 | 90.8 | 91.6 | 86.4 | 78.3 | 67.8 | 171.0 |
| 1600 | 71.7 | 77.8 | 80.0 | 82.3 | 84.8 | 86.1 | 85.1 | 87.3 | 90.0 | 88.5 | 83.2 | 74.9 | 64.2 | 169.6 |
| 2000 | 68.7 | 75.1 | 79.2 | 81.1 | 84.0 | 85.2 | 83.7 | 85.6 | 85.4 | 86.3 | 79.6 | 71.4 | 58.6 | 169.4 |
| 2500 | 61.7 | 71.4 | 74.3 | 77.5 | 81.6 | 83.2 | 80.1 | 81.8 | 81.4 | 81.5 | 74.5 | 65.5 | 53.1 | 168.2 |
| 3150 | 56.9 | 64.5 | 70.0 | 71.9 | 77.3 | 78.8 | 75.3 | 75.0 | 77.0 | 74.1 | 67.1 | 56.9 | 42.7 | 166.9 |
| 4000 | 48.4 | 55.5 | 63.9 | 67.2 | 69.0 | 69.7 | 68.7 | 68.9 | 68.7 | 67.3 | 57.6 | 42.2 | 21.5 | 166.3 |
| 5000 | 33.6 | 43.7 | 51.6 | 56.0 | 61.8 | 63.0 | 58.1 | 58.3 | 57.6 | 54.5 | 42.9 | 24.0 | | 165.8 |
| 6300 | 8.4 | 22.3 | 32.3 | 39.0 | 43.7 | 45.5 | 43.1 | 40.6 | 41.1 | 34.7 | 19.2 | | | 164.1 |
| 8000 | | | 5.1 | 13.6 | 17.1 | 19.4 | 19.2 | 15.5 | 16.0 | 3.6 | | | | 163.6 |
| 10000 | | | | | | | | | | | | | | 164.6 |

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OASPL 94.3 95.7 97.0 97.3 98.1 99.3 99.1 101.5 106.2 109.7 110.3 105.8 98.6 186.0
PNL 98.7 101.2 103.2 104.1 106.0 107.4 106.4 108.5 111.7 114.3 112.7 106.1 97.8
PNLT 99.9 102.2 103.2 104.1 107.2 108.6 106.4 108.5 111.7 114.9 113.7 106.1 98.0

DIAMETER RATIO 8.260 FREQUENCY SHIFT -9

TEST DATE 02-07-78 TAPE NO. N291 IALPHA SB59 TAMB 16.88
LOCATION C41 ANECH CH AERO. RDG. ADH041 PAMB 29.6938 RELHUM 43.40

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
0100 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)

07/19/79 14.683

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X01020
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250 84.3 88.6 87.1 88.1 88.5 91.3 93.3 95.4 100.3 105.4 110.8 114.0 114.1 147.2
315 85.6 87.6 88.2 88.2 90.0 92.4 93.6 95.5 102.2 108.0 112.6 116.6 114.7 149.1
400 87.9 88.7 90.1 89.0 90.8 92.9 94.1 95.5 103.2 112.0 115.4 117.6 114.0 150.7
500 88.2 89.5 91.0 91.1 91.9 94.0 95.7 97.3 105.5 114.1 117.7 117.7 111.8 151.8
630 89.8 90.6 91.9 92.2 94.0 95.6 96.8 100.2 108.4 115.0 119.4 117.3 109.9 152.7
800 93.1 91.7 93.2 94.0 94.6 96.7 98.6 101.7 109.9 115.8 120.1 117.6 108.5 153.4
1000 96.0 95.8 96.5 95.8 96.9 97.5 99.4 102.8 111.3 115.6 120.0 115.9 106.1 153.1
1250 98.8 98.6 98.7 97.7 98.5 100.1 101.3 104.2 112.1 115.2 121.1 115.5 104.7 153.7
1600 107.7 105.0 103.1 99.6 99.2 101.3 102.7 105.3 112.7 116.4 121.4 115.6 105.8 154.4
2000 107.4 109.1 108.7 105.4 101.0 100.1 102.3 105.7 113.3 117.5 120.7 113.7 105.2 154.5
2500 105.0 106.8 108.6 108.6 107.9 104.3 103.7 106.6 113.2 117.7 119.6 112.6 103.8 154.3
3150 104.8 104.6 104.6 106.6 108.2 109.1 106.4 108.1 114.3 117.5 118.3 110.3 102.6 153.9
4000 103.8 105.2 105.2 103.7 104.0 107.4 108.5 108.7 113.6 117.1 116.5 108.6 100.4 153.1
5000 102.9 103.8 104.0 104.5 104.1 105.4 108.3 110.5 113.7 116.4 115.3 106.7 99.2 152.8
6300 101.9 103.2 103.8 103.5 104.3 106.9 107.1 110.2 113.9 115.1 113.7 105.0 98.4 152.3
8000 101.2 103.1 102.5 102.9 103.9 105.6 106.9 109.5 113.4 113.5 112.3 103.7 97.5 151.6
10000 100.1 102.4 102.6 102.0 103.8 105.7 105.6 109.2 112.8 113.5 110.7 103.3 96.9 151.7
12500 97.4 100.0 100.7 101.3 102.8 104.5 104.2 107.5 110.2 111.1 108.6 101.7 95.9 150.5
16000 95.9 98.4 99.4 100.5 102.5 103.7 102.9 105.5 107.7 109.6 106.3 100.4 94.6 150.1
20000 90.6 96.2 96.2 97.6 101.1 102.0 100.1 102.2 104.5 105.7 103.2 98.0 92.7 148.9
25000 89.9 91.7 93.7 93.8 98.5 99.1 96.7 96.6 101.7 101.0 98.1 94.1 90.7 147.5
31500 87.4 87.7 90.7 92.4 93.2 94.0 92.9 94.6 97.5 99.5 95.4 89.4 85.8 147.3
40000 82.2 82.7 85.4 85.6 90.6 91.1 87.7 89.4 92.4 93.7 90.0 83.9 81.4 146.5
50000 74.7 76.0 77.4 79.7 82.4 83.4 82.6 82.5 88.0 87.7 83.5 78.3 74.8 144.6
63000 68.6 69.4 71.1 73.3 74.1 75.1 76.1 75.9 83.2 80.9 77.2 73.0 69.1 143.7
80000 62.8 62.7 64.7 68.0 67.0 69.1 68.6 70.3 76.9 75.4 72.1 64.2 60.6 144.4

GASPL 114.6 115.4 115.6 115.1 115.5 116.6 116.9 119.3 124.4 127.8 130.4 126.8 121.3 165.7

TEST DATE 02-08-78
LOCATION C41 ANECH CH

TAPE NO. N292
AERG. RDG. ADH053

ALPHA SB59 IALPHA SB59
PAMB 29.7020 RELHUM 55.60

MODEL TEST POINT

12.2 M (40.0 FT) ARC

SIZE

20.52 SQ IN) - MODEL 88.09 M/SEC (289.0 FPS)

FREE-JET SPEED

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07/19/79 14.683

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 35 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X01020

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PHL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

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GASPL 119.9 120.0 119.3 118.3 118.1 118.5 117.7 119.2 124.7 127.3 129.6 127.1 123.7 166.2

MODEL/FULL SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 289.00 REFRACTION CORRECTION - YES
INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-08-78 TAPE NO. N292 ALPHA 3859 TAMB 14.54
LOCATION C41 ANECH CH AERO. RDG. ADH053 PAMB 29.7020 RELHUM 85.60

MODEL TEST POINT 0100 0102 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 132.4 SQ CM (20.52 SQ IN) - MODEL 66.09 M/SEC (289.0 FPS) FREE-JET SPEED

07/19/79 14.683

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 FEET INLET R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X01025

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 69.9 | 72.6 | 73.2 | 73.5 | 74.7 | 75.8 | 76.1 | 76.2 | 85.7 | 92.9 | 95.0 | 93.8 | 87.1 | 169.1 |
| 63 | 71.6 | 73.2 | 74.9 | 75.7 | 75.8 | 76.9 | 77.6 | 78.1 | 88.4 | 93.6 | 96.6 | 93.9 | 86.6 | 170.0 |
| 80 | 72.4 | 74.4 | 76.0 | 76.8 | 77.9 | 78.6 | 78.6 | 80.7 | 90.2 | 94.7 | 97.8 | 95.1 | 87.0 | 171.3 |
| 100 | 74.0 | 75.5 | 76.8 | 78.4 | 78.4 | 79.6 | 80.4 | 82.2 | 91.6 | 94.7 | 97.9 | 94.1 | 86.2 | 171.2 |
| 125 | 76.3 | 78.8 | 77.7 | 79.6 | 80.4 | 80.5 | 81.2 | 83.2 | 92.3 | 94.1 | 98.8 | 93.4 | 84.4 | 171.6 |
| 160 | 77.9 | 78.8 | 80.1 | 81.4 | 82.0 | 83.0 | 84.0 | 84.5 | 92.9 | 95.3 | 99.0 | 93.3 | 85.4 | 172.2 |
| 200 | 80.8 | 81.7 | 82.1 | 83.8 | 82.7 | 84.1 | 84.3 | 85.6 | 93.4 | 96.2 | 98.0 | 90.9 | 84.0 | 171.9 |
| 250 | 90.8 | 89.1 | 87.3 | 90.4 | 84.9 | 82.9 | 83.8 | 85.8 | 93.2 | 96.2 | 86.7 | 89.4 | 81.9 | 172.3 |
| 315 | 92.0 | 94.5 | 93.9 | 92.1 | 91.2 | 87.0 | 85.1 | 86.6 | 94.2 | 95.9 | 95.0 | 86.7 | 79.7 | 173.3 |
| 400 | 85.7 | 88.9 | 91.5 | 90.5 | 91.6 | 91.7 | 87.8 | 88.0 | 93.5 | 96.4 | 93.2 | 84.8 | 77.0 | 172.3 |
| 500 | 86.6 | 87.6 | 88.2 | 87.0 | 87.2 | 90.0 | 89.9 | 88.6 | 93.7 | 94.8 | 92.0 | 82.7 | 75.3 | 171.8 |
| 630 | 83.8 | 86.9 | 87.3 | 87.9 | 87.3 | 88.1 | 89.8 | 90.5 | 94.3 | 93.8 | 90.6 | 81.0 | 74.2 | 171.8 |
| 800 | 82.6 | 85.3 | 86.6 | 87.2 | 87.8 | 89.8 | 89.9 | 90.5 | 94.2 | 92.4 | 89.2 | 79.4 | 72.4 | 171.7 |
| 1000 | 82.0 | 85.1 | 86.6 | 86.7 | 87.7 | 88.9 | 89.2 | 90.3 | 93.5 | 92.3 | 87.4 | 79.0 | 70.8 | 171.8 |
| 1250 | 80.6 | 84.6 | 85.1 | 85.9 | 87.7 | 89.3 | 88.0 | 89.9 | 91.0 | 89.9 | 85.1 | 76.4 | 68.7 | 171.1 |
| 1600 | 78.4 | 83.1 | 84.7 | 84.8 | 86.5 | 87.7 | 86.3 | 87.9 | 88.6 | 88.4 | 82.4 | 74.2 | 65.6 | 170.7 |
| 2000 | 74.1 | 79.6 | 81.8 | 84.7 | 86.3 | 86.9 | 84.9 | 85.5 | 84.3 | 78.8 | 70.7 | 61.1 | 51.1 | 170.0 |
| 2500 | 72.4 | 77.9 | 80.5 | 81.0 | 84.4 | 84.6 | 81.6 | 81.7 | 83.3 | 80.0 | 73.8 | 66.3 | 57.2 | 169.8 |
| 3150 | 63.1 | 72.7 | 74.8 | 75.7 | 80.4 | 80.4 | 77.1 | 75.3 | 77.1 | 75.8 | 67.2 | 55.7 | 42.2 | 168.8 |
| 4000 | 55.4 | 62.7 | 67.8 | 70.2 | 71.7 | 72.3 | 69.9 | 69.3 | 69.2 | 66.3 | 56.6 | 42.3 | 24.6 | 167.7 |
| 5000 | 40.4 | 48.7 | 56.4 | 59.6 | 64.6 | 64.6 | 59.8 | 56.8 | 58.9 | 53.0 | 40.7 | 23.5 | | 167.3 |
| 6300 | 18.9 | 30.6 | 39.9 | 42.1 | 46.3 | 47.1 | 44.6 | 41.1 | 43.0 | 32.9 | 17.4 | | | 165.8 |
| 8000 | | | 9.6 | 15.6 | 19.5 | 21.0 | 20.0 | 15.2 | 16.8 | 4.0 | | | | 164.8 |
| 10000 | | | | | | | | | | | | | | 163.2 |

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GASPL 96.7 98.5 99.0 98.9 99.0 99.4 98.6 99.5 104.6 106.3 107.5 102.6 95.0 184.4
 PNL 102.5 105.4 106.1 106.3 107.6 108.1 106.6 107.4 110.6 111.4 110.2 103.3 95.6
 PNL 103.9 105.3 106.8 106.3 108.8 109.2 107.1 107.4 111.2 111.4 110.2 103.3 96.8

DIAMETER RATIO 8.260 FREQUENCY SHIFT -9

TEST DATE 02-08-78 TAPE NO. N292 ALPHA SB59 TAMB 14.54
 LOCATION C41 ANECH CH AERO. RDG. ADH053 PAMB 29.7020 RELHUM 55.80

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
 0100 0102 731.5 M (2400.0 FT) SL 9032.2 SQ CH (1400.00 SQ IN) - FULL 89.09 M/SEC (289.0 FPS)

07/19/79 14.683

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X01030
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250 83.6 86.9 86.7 87.2 88.3 90.2 92.6 94.3 98.5 104.9 110.0 113.5 112.9 146.4
315 84.8 86.6 87.1 89.2 91.1 92.0 94.2 101.4 106.7 111.6 115.1 112.7 147.7
400 86.6 87.4 88.5 89.1 89.3 90.9 93.2 95.1 97.1 104.8 113.4 117.5 116.4 108.8 161.1
500 87.4 88.5 89.1 89.3 90.9 93.2 95.1 97.1 104.8 113.4 117.5 116.4 108.8 161.1
630 88.3 89.6 90.6 90.7 94.0 94.4 95.8 96.9 107.1 113.7 118.4 115.5 105.7 161.4
800 90.9 90.6 91.7 92.7 93.3 95.7 97.5 100.7 109.7 115.5 118.6 114.1 104.5 161.9
1000 94.2 93.8 95.0 94.1 94.9 97.3 99.1 102.3 110.8 115.4 118.5 112.2 102.6 151.8
1250 99.3 101.1 98.4 96.4 96.8 98.6 99.5 103.2 111.1 115.0 118.9 111.3 101.9 151.9
1600 107.9 105.3 103.8 100.8 98.9 100.3 101.4 104.6 112.5 115.7 118.9 111.6 103.1 152.7
2000 107.1 108.4 108.2 105.9 101.0 99.9 101.5 105.2 113.1 116.8 118.5 110.9 102.4 153.2
2500 104.0 106.1 107.8 108.8 108.7 104.8 103.7 106.1 113.0 116.7 117.9 110.6 102.8 153.3
3150 104.0 103.8 103.1 105.4 107.7 109.8 106.7 107.1 113.8 116.5 117.2 110.3 102.1 153.2
4000 103.3 103.9 104.9 103.2 103.2 107.1 109.0 107.9 113.8 116.3 116.7 107.9 100.6 152.6
5000 101.7 102.3 103.5 104.0 104.3 104.9 107.0 110.3 113.9 116.9 114.6 106.2 100.0 152.4
6300 100.9 102.0 103.3 102.7 104.0 106.4 107.1 110.5 114.7 114.9 113.2 105.2 99.2 152.3
8000 100.7 101.9 102.0 102.6 103.4 105.1 106.6 109.5 113.9 114.0 111.5 104.2 97.5 151.7
10000 99.1 101.4 101.6 102.0 103.1 105.2 106.1 108.9 112.7 113.0 110.2 103.5 97.1 151.4
12500 97.1 99.5 99.4 100.5 102.1 104.0 103.9 107.0 110.2 110.9 107.9 102.0 95.7 150.1
16000 94.9 97.6 99.2 99.8 102.0 103.5 102.2 105.3 107.7 108.9 105.0 100.4 94.6 149.6
20000 90.1 94.9 95.7 96.8 100.6 102.0 99.4 102.4 105.0 105.5 102.2 98.0 93.2 148.7
25000 88.7 90.5 92.7 93.6 97.5 98.1 96.2 96.9 102.0 100.6 97.9 94.1 91.5 147.2
31500 86.7 87.2 90.2 91.9 92.7 93.0 92.6 94.1 97.0 99.0 96.1 89.4 85.5 146.8
40000 81.7 81.9 84.6 86.1 90.4 91.1 87.2 88.9 92.1 83.5 89.8 83.7 80.9 146.2
50000 74.0 74.7 77.2 79.7 81.6 82.9 82.1 81.8 88.2 86.2 83.8 78.3 75.0 144.2
63000 68.1 68.4 70.6 72.5 73.1 74.8 75.8 75.2 80.2 77.2 72.3 69.6 143.3
80000 61.5 61.7 64.2 67.0 66.5 68.9 68.1 69.1 76.6 74.9 71.4 63.4 61.4 143.9

CASPL 114.1 114.8 115.0 114.8 115.3 116.4 116.7 118.9 124.3 127.2 129.0 124.9 119.2 164.8

TEST DATE 02-08-78
LOCATION C41 ANECH CH

TAPE NO. N292
AERO. RDG. ADH054

ALPHA SB59
PAMB 29.6970

TAMB 14.84
RELHUM 55.60

MODEL TEST POINT
0100 0103

ACOUSTIC RANGE
12.2 M (40.0 FT) ARC

SIZE
132.4 SQ CM (20.52 SQ IN) - MODEL

FREE-JET SPEED
117.35 M/SEC (385.0 FPS)

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OF POOR QUALITY

07/19/79 14.683

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X01030

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 90.5 | 92.6 | 91.1 | 90.2 | 89.6 | 90.2 | 90.8 | 90.8 | 98.0 | 102.5 | 106.9 | 110.8 | 110.2 | 143.8 |
| 315 | 90.5 | 92.6 | 91.1 | 90.2 | 91.0 | 91.3 | 90.7 | 91.5 | 100.8 | 107.9 | 111.9 | 114.1 | 111.7 | 147.3 |
| 400 | 92.1 | 92.7 | 91.8 | 90.4 | 91.2 | 92.1 | 92.5 | 93.6 | 102.9 | 111.1 | 115.3 | 118.7 | 111.8 | 149.6 |
| 500 | 93.2 | 93.0 | 92.9 | 91.3 | 92.7 | 93.5 | 94.3 | 95.1 | 105.2 | 111.4 | 116.3 | 115.6 | 110.4 | 150.0 |
| 630 | 94.5 | 94.5 | 93.8 | 92.5 | 95.9 | 94.7 | 94.8 | 96.8 | 108.1 | 113.6 | 117.2 | 115.3 | 111.8 | 151.1 |
| 800 | 95.7 | 95.8 | 95.4 | 94.0 | 95.2 | 96.1 | 96.7 | 98.6 | 109.5 | 113.9 | 117.6 | 114.6 | 112.3 | 151.4 |
| 1000 | 97.6 | 96.5 | 96.3 | 96.0 | 96.6 | 97.9 | 98.4 | 100.3 | 109.9 | 113.6 | 118.0 | 113.7 | 111.6 | 151.4 |
| 1250 | 99.4 | 98.3 | 98.7 | 98.4 | 99.4 | 99.4 | 98.9 | 101.3 | 109.9 | 114.6 | 119.4 | 114.4 | 113.2 | 152.2 |
| 1600 | 105.8 | 106.4 | 102.4 | 99.2 | 101.0 | 101.2 | 101.0 | 102.9 | 112.3 | 115.8 | 118.0 | 115.2 | 112.5 | 152.7 |
| 2000 | 115.2 | 112.4 | 108.7 | 104.3 | 103.8 | 101.1 | 101.3 | 103.7 | 112.7 | 116.1 | 117.9 | 114.5 | 113.5 | 154.0 |
| 2500 | 117.0 | 116.7 | 114.7 | 110.6 | 111.3 | 106.3 | 103.8 | 105.0 | 113.9 | 116.4 | 117.6 | 114.1 | 113.2 | 155.9 |
| 3150 | 110.2 | 111.6 | 112.5 | 112.5 | 110.8 | 111.7 | 107.2 | 106.4 | 114.4 | 116.6 | 116.4 | 111.6 | 111.1 | 154.8 |
| 4000 | 111.3 | 110.2 | 108.4 | 109.5 | 106.6 | 109.5 | 110.0 | 107.7 | 114.7 | 116.2 | 115.2 | 109.7 | 110.2 | 153.8 |
| 5000 | 109.6 | 109.7 | 110.0 | 107.3 | 108.3 | 107.9 | 109.3 | 110.4 | 115.6 | 115.3 | 114.0 | 108.9 | 109.3 | 153.8 |
| 6300 | 108.8 | 108.7 | 109.1 | 108.7 | 108.0 | 109.4 | 108.7 | 110.7 | 115.0 | 114.6 | 112.5 | 108.1 | 108.2 | 153.6 |
| 8000 | 107.9 | 108.3 | 108.7 | 107.3 | 107.4 | 108.1 | 108.3 | 109.7 | 114.1 | 113.8 | 111.3 | 107.5 | 107.5 | 153.1 |
| 10000 | 107.6 | 108.0 | 107.3 | 107.0 | 107.1 | 108.2 | 107.8 | 109.2 | 111.8 | 112.0 | 109.3 | 106.2 | 106.6 | 152.5 |
| 12500 | 105.7 | 107.3 | 106.6 | 106.1 | 106.1 | 107.0 | 105.6 | 107.3 | 110.4 | 111.2 | 107.9 | 106.5 | 108.2 | 152.2 |
| 16000 | 103.2 | 104.8 | 103.9 | 104.1 | 106.5 | 106.5 | 104.3 | 106.1 | 108.7 | 109.0 | 106.3 | 105.4 | 107.9 | 152.0 |
| 20000 | 103.2 | 104.7 | 104.9 | 104.1 | 105.1 | 105.0 | 101.7 | 103.6 | 107.2 | 105.5 | 103.4 | 102.6 | 106.7 | 152.2 |
| 25000 | 97.8 | 101.4 | 100.8 | 100.5 | 102.0 | 101.1 | 98.6 | 98.7 | 101.6 | 103.3 | 100.0 | 97.6 | 101.0 | 150.7 |
| 31500 | 95.6 | 96.2 | 97.1 | 96.5 | 96.6 | 96.0 | 94.8 | 95.0 | 98.2 | 99.4 | 96.3 | 93.5 | 98.0 | 149.7 |
| 40000 | 90.1 | 89.9 | 92.1 | 92.8 | 94.9 | 94.1 | 89.5 | 90.2 | 94.6 | 92.3 | 90.6 | 88.5 | 92.4 | 149.4 |
| 50000 | 87.3 | 86.4 | 87.8 | 87.8 | 86.2 | 85.9 | 84.4 | 83.0 | 90.5 | 87.1 | 84.8 | 83.2 | 87.8 | 148.3 |
| 63000 | 78.7 | 78.3 | 79.4 | 80.4 | 77.1 | 77.8 | 78.1 | 76.3 | 84.3 | 82.0 | 78.8 | 73.7 | 78.4 | 146.4 |
| 80000 | 68.7 | 68.3 | 69.6 | 70.7 | 70.4 | 71.9 | 69.9 | 69.4 | 74.5 | 72.2 | 69.0 | 63.9 | 68.6 | 144.3 |
| GASPL | 121.8 | 121.4 | 125.4 | 118.9 | 118.7 | 118.8 | 117.8 | 118.8 | 124.8 | 126.8 | 128.3 | 125.5 | 123.9 | 166.0 |

| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 385.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 02-08-78 | TAPE NO. | N292 | ALPHA | 3859 | TAMB | 14.54 |
|-----------|---|------------|---|-------|--|--------|-------|
| LOCATION | C41 ANECH CH <th>AERO. RDG.</th> <td>ADH054 <th>PAMB</th> <td>29.6970 <th>RELHUM</th> <td>55.60</td> </td></td> | AERO. RDG. | ADH054 <th>PAMB</th> <td>29.6970 <th>RELHUM</th> <td>55.60</td> </td> | PAMB | 29.6970 <th>RELHUM</th> <td>55.60</td> | RELHUM | 55.60 |

| MODEL | TEST POINT | ACQUSTIC RANGE | 12.2 M (40.0 FT) | ARC | 132.4 SQ CM (20.62 SQ IN) | MODEL | 117.36 M/SEC (385.0 FPS) |
|-------|------------|----------------|-------------------|-----|----------------------------|-------|---------------------------|
| 0100 | 0103 | | | | | | |

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07/19/79 14.683

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 35' 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X01035

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 71.0 | 73.1 | 73.3 | 72.6 | 73.6 | 74.9 | 75.1 | 75.8 | 84.4 | 91.5 | 94.2 | 92.4 | 85.0 | 167.9 |
| 53 | 72.0 | 73.4 | 74.4 | 73.5 | 75.3 | 76.3 | 76.9 | 77.3 | 86.7 | 91.8 | 95.2 | 92.2 | 83.7 | 168.4 |
| 80 | 73.3 | 74.8 | 75.3 | 74.7 | 76.4 | 77.5 | 77.4 | 79.0 | 89.5 | 94.0 | 96.0 | 91.9 | 85.0 | 169.4 |
| 100 | 74.4 | 75.1 | 76.8 | 76.1 | 77.7 | 78.8 | 79.2 | 80.7 | 90.9 | 94.2 | 96.4 | 91.1 | 85.3 | 169.7 |
| 125 | 76.3 | 76.7 | 77.6 | 78.0 | 79.0 | 80.4 | 80.8 | 82.3 | 91.2 | 93.6 | 96.6 | 90.1 | 84.5 | 169.7 |
| 160 | 77.9 | 78.4 | 79.9 | 78.7 | 80.8 | 81.8 | 81.2 | 83.2 | 92.8 | 94.6 | 96.8 | 90.5 | 85.6 | 170.6 |
| 200 | 84.0 | 86.3 | 83.4 | 80.9 | 83.2 | 83.6 | 83.2 | 84.7 | 93.3 | 95.6 | 96.2 | 89.5 | 84.5 | 171.0 |
| 250 | 93.0 | 92.0 | 85.4 | 85.8 | 85.8 | 83.2 | 83.3 | 85.3 | 93.4 | 95.7 | 95.8 | 89.3 | 84.9 | 172.4 |
| 315 | 94.4 | 95.9 | 95.2 | 91.9 | 93.0 | 88.1 | 85.3 | 86.3 | 94.3 | 95.6 | 95.1 | 88.9 | 83.7 | 174.2 |
| 400 | 87.2 | 90.5 | 92.6 | 93.5 | 92.2 | 93.2 | 88.6 | 87.4 | 94.5 | 95.4 | 93.3 | 85.8 | 80.7 | 173.1 |
| 500 | 87.8 | 88.6 | 88.2 | 90.2 | 87.7 | 90.8 | 91.1 | 89.3 | 94.5 | 94.7 | 91.6 | 83.2 | 78.7 | 172.3 |
| 630 | 85.5 | 87.7 | 89.4 | 87.7 | 89.2 | 88.9 | 90.2 | 90.7 | 95.0 | 93.4 | 89.9 | 81.7 | 77.0 | 172.1 |
| 800 | 84.3 | 86.4 | 88.3 | 88.8 | 88.6 | 90.2 | 89.3 | 90.8 | 94.1 | 92.3 | 88.0 | 80.2 | 74.4 | 171.9 |
| 1000 | 82.9 | 85.7 | 87.7 | 87.2 | 87.9 | 88.7 | 88.6 | 89.6 | 93.0 | 91.2 | 86.3 | 79.0 | 73.0 | 171.4 |
| 1250 | 82.1 | 85.0 | 86.0 | 86.7 | 87.4 | 88.8 | 88.2 | 88.9 | 90.4 | 89.0 | 83.8 | 76.8 | 70.4 | 170.8 |
| 1600 | 79.3 | 83.7 | 84.9 | 85.5 | 86.1 | 87.2 | 85.7 | 85.7 | 88.6 | 87.7 | 81.6 | 75.8 | 69.6 | 170.5 |
| 2000 | 75.9 | 80.7 | 81.6 | 83.3 | 86.4 | 85.6 | 84.2 | 83.2 | 86.6 | 84.6 | 79.0 | 73.1 | 66.3 | 170.4 |
| 2500 | 74.1 | 79.3 | 81.9 | 82.6 | 84.5 | 84.6 | 81.0 | 82.1 | 84.2 | 80.1 | 74.3 | 67.4 | 60.1 | 170.8 |
| 3150 | 65.3 | 73.6 | 76.0 | 77.4 | 79.9 | 79.4 | 76.6 | 75.6 | 76.7 | 75.5 | 67.5 | 57.4 | 46.1 | 169.0 |
| 4000 | 56.9 | 63.6 | 69.4 | 70.2 | 71.6 | 71.3 | 69.7 | 69.6 | 69.5 | 66.9 | 57.6 | 44.5 | 28.6 | 168.1 |
| 5000 | 41.6 | 49.8 | 57.1 | 61.1 | 64.8 | 64.6 | 59.3 | 58.5 | 59.7 | 52.2 | 42.1 | 25.7 | 1.1 | 167.8 |
| 6300 | 21.1 | 32.1 | 40.8 | 45.2 | 46.1 | 46.6 | 44.5 | 40.5 | 43.5 | 32.8 | 18.6 | | | 166.6 |
| 8000 | | | 11.0 | 18.6 | 18.9 | 20.7 | 19.6 | 14.6 | 16.0 | 2.9 | | | | 164.7 |
| 10000 | | | | | | | | | | | | | | 162.6 |

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CLASSPL 98.7 100.1 100.2 99.4 99.6 99.8 98.7 99.0 104.6 105.6 106.1 100.8 94.7 184.3
PNL 104.4 106.7 107.1 106.8 107.8 108.0 106.2 106.9 110.9 111.1 109.3 102.9 97.1
PNLT 105.2 107.5 108.1 107.4 109.1 109.2 106.7 106.6 111.5 111.7 109.3 102.9 98.2

DIAMETER RATIO 6.260 FREQUENCY SHIFT -9

TEST DATE 02-08-78 TAPE NO. N292 ALPHA SB59 TAMB 14.54
LOCATION C41 ANECH CH AERO. RDG. ADH054 PAMB 29.6970 RELHUM 86.60

MODEL TEST POINT 0103 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.35 M/SEC (385.0 FPS)
FREE-JET SPEED

07/19/79 18.050

90

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X0104/0
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

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MODEL TEST POINT 0100 0104 ACQUSTIC RANGE 12.2 M (40.0 FT) ARC 132.4 SQ CM (20.52 SQ IN) - MODEL 0. M/SEC (0. FPS) FREE-JET SPEED

TEST DATE 02-07-78 TAPE NO. N291 ALPHA SB59 TAMB 16.88
LOCATION C41 ANECH CH AERO. RDG. ADH043 PAMB 29.6910 RELHUM 43.40

07/19/79 19.690

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X01040

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

109.9

111.7

111.8

112.8

114.7

115.0

118.5

124.8

128.2

130.8

129.9

126.8

166.2

MODEL/FULL SIZE SCALE FACTOR

INPUT 1.000

CALC. 1.000

FREE JET VELOCITY (FT/SEC)

FREE JET DIAMETER (IN)

0.

48.00

REFRACTION CORRECTION - YES

TURBULANCE CORRECTION - YES

TEST DATE 02-07-78

LOCATION C41 ANECH CH

TAPE NO. N291

AERO. RDO. ADH043

ALPHA 5859

PAMB 29.5910

RELHUM 43.40

TAMB 16.86

FREE-JET SPEED

MODEL TEST POINT

12.2 M (40.0 FT) ARC

132.4 SQ CM (20.52 SQ IN) - MODEL

SIZE

0. M/SEC (0. FPS)

0100

0104

91

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07/19/79 18.690

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X01045

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|-------|------|------|-------|
| 50 | 67.8 | 71.6 | 74.0 | 73.5 | 75.5 | 77.7 | 78.5 | 80.7 | 87.5 | 94.5 | 96.1 | 95.3 | 89.4 | 170.6 |
| 63 | 69.1 | 72.9 | 75.3 | 75.3 | 76.5 | 79.3 | 79.8 | 81.8 | 88.8 | 95.8 | 97.9 | 96.1 | 90.1 | 171.9 |
| 80 | 70.4 | 74.3 | 75.9 | 75.4 | 78.1 | 80.6 | 81.1 | 84.1 | 91.4 | 96.3 | 98.4 | 96.4 | 90.6 | 172.6 |
| 100 | 74.9 | 75.2 | 77.1 | 78.3 | 79.4 | 81.6 | 82.6 | 85.6 | 92.8 | 97.1 | 99.4 | 97.1 | 91.0 | 173.5 |
| 125 | 78.6 | 81.2 | 81.9 | 81.6 | 81.1 | 83.4 | 83.9 | 86.9 | 94.1 | 96.8 | 98.9 | 96.8 | 90.7 | 173.5 |
| 160 | 74.5 | 80.5 | 81.8 | 82.4 | 83.9 | 85.6 | 85.4 | 88.1 | 95.0 | 96.3 | 100.6 | 97.9 | 89.6 | 174.6 |
| 200 | 76.9 | 77.4 | 79.1 | 80.4 | 82.1 | 84.6 | 85.4 | 88.4 | 95.7 | 96.5 | 99.3 | 95.1 | 86.8 | 173.6 |
| 250 | 77.5 | 81.2 | 81.7 | 81.2 | 81.3 | 84.0 | 85.0 | 88.0 | 95.8 | 96.9 | 98.3 | 92.8 | 83.3 | 173.1 |
| 315 | 78.2 | 80.5 | 81.5 | 81.9 | 82.6 | 83.9 | 85.4 | 88.6 | 93.4 | 97.9 | 97.1 | 90.4 | 80.1 | 172.9 |
| 400 | 78.5 | 81.9 | 81.7 | 82.5 | 82.1 | 84.4 | 85.6 | 88.8 | 94.9 | 96.5 | 94.8 | 88.5 | 78.1 | 172.0 |
| 500 | 76.8 | 79.8 | 81.7 | 82.0 | 82.8 | 84.1 | 84.6 | 85.8 | 93.6 | 94.7 | 92.6 | 85.8 | 75.6 | 170.8 |
| 630 | 74.6 | 78.7 | 79.9 | 81.6 | 82.9 | 84.9 | 85.4 | 88.6 | 92.3 | 94.1 | 91.5 | 84.2 | 73.9 | 170.5 |
| 800 | 73.1 | 77.3 | 79.7 | 80.8 | 82.6 | 85.3 | 85.1 | 87.5 | 91.7 | 92.7 | 89.6 | 82.3 | 72.2 | 169.9 |
| 1000 | 71.2 | 76.6 | 78.5 | 79.9 | 82.1 | 84.4 | 84.8 | 87.0 | 90.4 | 90.8 | 87.8 | 79.4 | 70.1 | 169.1 |
| 1250 | 68.8 | 75.1 | 78.2 | 79.4 | 81.8 | 84.4 | 83.6 | 86.6 | 88.8 | 89.9 | 85.6 | 78.0 | 67.8 | 168.7 |
| 1600 | 65.2 | 72.6 | 75.3 | 77.8 | 80.5 | 82.9 | 81.9 | 84.8 | 86.5 | 86.7 | 82.4 | 75.1 | 64.2 | 167.6 |
| 2000 | 62.0 | 70.1 | 74.2 | 76.6 | 80.0 | 81.7 | 80.0 | 82.8 | 84.2 | 84.6 | 78.9 | 71.1 | 59.6 | 167.2 |
| 2500 | 55.4 | 66.7 | 69.8 | 73.0 | 77.8 | 80.0 | 76.8 | 78.8 | 80.1 | 79.7 | 73.7 | 65.7 | 52.4 | 166.0 |
| 3150 | 50.4 | 59.5 | 65.2 | 67.5 | 73.6 | 75.3 | 72.3 | 72.0 | 75.5 | 72.3 | 66.8 | 56.6 | 41.5 | 164.6 |
| 4000 | 42.1 | 51.8 | 59.4 | 63.2 | 65.5 | 66.7 | 65.5 | 66.2 | 67.2 | 65.8 | 56.6 | 42.5 | 21.5 | 164.1 |
| 5000 | 27.3 | 39.4 | 47.6 | 52.5 | 58.3 | 59.5 | 54.6 | 55.6 | 56.3 | 53.0 | 42.2 | 24.3 | | 163.5 |
| 6300 | 2.1 | 18.0 | 27.8 | 35.3 | 39.2 | 41.7 | 39.4 | 37.9 | 39.6 | 33.2 | 18.4 | | | 161.8 |
| 8000 | | | 0.6 | 9.4 | 13.3 | 15.9 | 15.5 | 12.0 | 13.5 | 1.9 | | | | 161.2 |
| 10000 | | | | | | | | | | | | | | 162.9 |

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DIAMETER RATIO 8.260 FREQUENCY SHIFT -9

TEST DATE 02-07-78 TAPE NO. N291 IALPHA SB59 TAMB 16.88
LOCATION C41 ANECH CH AERO. RDG. ADH043 PAMB 29.6910 RELHUM 43.40

MODEL TEST POINT 0104 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)
FREE-JET SPEED

07/19/79 14.683

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 98 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-F/MDL XG108C
BACKGROUND FJB300-F/MDL X01300

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. FAL

FREQ

50

63

80

100

125

160

200

250 83.0 86.8 85.8 86.6 87.2 89.8 91.9 93.6 98.6 103.6 108.6 112.0 111.6 148.1
315 84.9 86.6 86.9 87.0 88.8 90.7 91.5 93.7 101.2 106.5 110.9 114.1 112.2 146.9
400 86.4 87.9 88.9 87.7 89.6 91.7 93.1 94.7 102.7 110.3 114.4 116.3 111.3 149.0
500 87.5 88.3 89.5 89.3 90.7 93.3 94.7 96.1 104.0 112.1 115.7 116.7 109.6 149.9
630 88.1 89.4 90.9 90.7 94.5 94.4 95.6 96.4 106.4 113.2 117.1 115.5 106.9 160.7
800 91.6 90.2 91.9 92.2 93.6 95.4 96.8 99.7 108.4 114.0 117.6 115.3 104.7 151.2
1000 93.7 92.5 94.0 93.6 94.7 96.5 98.4 101.3 110.0 113.6 117.5 113.7 102.6 150.9
1250 92.1 94.4 95.2 95.7 97.0 98.6 99.3 102.9 110.6 113.5 117.9 113.3 101.7 151.1
1600 94.2 93.0 94.6 95.6 96.9 99.5 101.4 103.6 111.2 113.4 117.6 112.3 101.6 151.1
2000 96.6 95.9 95.7 95.2 95.5 97.9 99.5 103.7 111.8 115.0 116.7 111.7 101.2 151.1
2500 99.0 99.8 99.3 97.1 96.9 98.8 101.7 105.1 112.0 116.2 117.4 111.3 101.8 151.9
3150 98.6 100.1 100.4 100.4 99.0 99.8 101.5 105.6 112.0 114.3 116.2 110.4 101.6 151.0
4000 96.6 97.2 98.7 99.0 100.0 100.4 101.5 105.2 111.6 114.1 114.0 107.4 96.9 150.1
5000 96.7 96.8 96.6 97.8 98.7 101.5 102.7 105.3 111.0 114.3 113.1 106.0 97.5 149.9
6300 96.0 97.4 97.9 97.4 98.6 101.2 102.7 105.1 111.5 113.0 113.0 104.8 97.3 149.3
8000 95.9 97.5 97.6 97.0 98.8 100.4 102.5 105.3 110.5 112.4 110.2 102.9 95.4 149.0
10000 94.0 96.3 98.0 97.4 99.0 100.9 101.3 104.8 109.2 111.2 108.3 102.6 95.0 148.4
12500 92.0 94.7 95.6 96.7 97.7 99.6 100.8 103.2 107.1 106.8 105.8 101.1 94.3 147.2
16000 90.3 93.3 94.6 95.2 97.6 99.4 98.6 102.4 105.1 107.6 104.5 99.5 93.7 147.3
20000 85.5 91.4 91.6 92.7 96.3 98.1 96.3 99.3 102.4 104.4 101.4 96.6 91.4 146.3
25000 84.3 87.2 89.4 89.5 93.6 94.5 92.8 93.6 99.4 99.7 97.6 93.8 90.1 144.8
31500 83.6 83.9 87.1 88.8 88.3 89.6 88.6 90.5 95.2 98.2 94.1 88.6 84.9 144.8
40000 79.1 79.4 82.3 83.6 87.1 87.0 83.4 86.1 90.1 92.2 88.5 82.8 80.3 143.8
50000 71.9 72.7 74.9 76.9 78.8 79.8 78.5 78.7 85.2 85.7 82.0 77.5 74.2 141.9
63000 66.0 66.2 68.8 70.5 70.6 72.2 72.8 71.9 81.5 79.4 75.9 71.0 66.3 141.6
80000 60.0 59.7 62.5 65.4 63.7 66.6 65.4 66.0 73.9 76.4 70.9 62.4 60.3 142.4

0ASPL 107.3 108.3 108.9 108.8 110.0 111.7 112.8 115.9 122.4 125.7 127.8 124.8 118.7 163.0

TEST DATE 02-08-78 TAPE NO. N292 ALPHA SR59 TAMB 19.76
LOCATION C41 ANECH CH AERO. RDG. ADH057 PAMB 29.210 RELHUM 49.40

MODEL TEST POINT 0105 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 132.4 SQ CH (20.52 SQ IN) - MODEL 88.09 M/SEC (289.0 FPS) FREE-JET SPEED

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07/19/79 14.583

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X01050

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 88.1 | 91.0 | 89.0 | 88.8 | 88.3 | 89.8 | 90.5 | 91.0 | 98.6 | 103.2 | 107.1 | 110.6 | 110.1 | 143.8 |
| 315 | 88.1 | 91.0 | 89.0 | 89.3 | 90.0 | 90.8 | 90.5 | 91.6 | 101.2 | 106.2 | 112.1 | 113.7 | 111.4 | 147.3 |
| 400 | 90.1 | 91.1 | 90.3 | 90.0 | 90.8 | 91.8 | 92.4 | 93.4 | 102.6 | 110.4 | 114.0 | 115.0 | 111.5 | 148.8 |
| 500 | 91.2 | 92.0 | 92.1 | 91.8 | 92.0 | 93.5 | 94.0 | 94.6 | 104.9 | 111.4 | 115.4 | 116.4 | 110.2 | 149.6 |
| 630 | 92.9 | 92.8 | 93.0 | 93.2 | 95.9 | 94.6 | 95.0 | 96.8 | 107.1 | 112.4 | 116.3 | 116.1 | 110.0 | 150.5 |
| 800 | 93.5 | 93.9 | 94.4 | 94.5 | 94.9 | 95.7 | 96.0 | 98.0 | 108.9 | 112.3 | 116.6 | 115.2 | 109.5 | 150.5 |
| 1000 | 95.4 | 94.3 | 95.2 | 95.7 | 95.9 | 96.9 | 97.7 | 99.6 | 109.4 | 112.1 | 116.9 | 114.7 | 108.6 | 150.6 |
| 1250 | 97.8 | 96.1 | 96.9 | 98.3 | 98.5 | 99.1 | 98.6 | 101.3 | 110.2 | 112.1 | 116.7 | 113.8 | 108.5 | 150.5 |
| 1600 | 97.5 | 98.9 | 98.8 | 98.3 | 98.5 | 100.1 | 100.9 | 102.1 | 110.9 | 113.8 | 115.8 | 113.1 | 108.0 | 150.6 |
| 2000 | 99.6 | 97.6 | 98.2 | 97.2 | 96.8 | 98.5 | 99.1 | 102.3 | 111.2 | 115.1 | 116.6 | 112.8 | 108.5 | 151.2 |
| 2500 | 100.4 | 99.1 | 98.2 | 99.3 | 98.4 | 99.6 | 101.4 | 103.8 | 111.6 | 113.6 | 115.8 | 112.3 | 109.0 | 150.7 |
| 3150 | 103.4 | 103.4 | 102.2 | 102.6 | 100.6 | 100.9 | 101.5 | 104.7 | 111.5 | 113.7 | 113.8 | 109.5 | 106.0 | 150.2 |
| 4000 | 102.0 | 103.2 | 103.0 | 102.1 | 102.3 | 101.7 | 101.8 | 104.5 | 111.3 | 114.3 | 113.4 | 108.6 | 105.1 | 150.3 |
| 5000 | 101.9 | 101.8 | 102.6 | 101.2 | 102.2 | 103.2 | 103.3 | 105.0 | 112.4 | 113.6 | 112.2 | 108.0 | 105.6 | 150.3 |
| 6300 | 101.9 | 101.4 | 100.5 | 101.0 | 101.5 | 103.3 | 103.7 | 105.2 | 112.1 | 113.6 | 111.6 | 106.4 | 104.9 | 150.2 |
| 8000 | 101.0 | 101.9 | 101.8 | 100.9 | 102.1 | 103.1 | 104.2 | 106.1 | 110.9 | 112.5 | 109.9 | 106.3 | 103.7 | 149.8 |
| 10000 | 100.7 | 102.0 | 101.6 | 101.5 | 102.5 | 103.9 | 103.2 | 105.6 | 109.1 | 110.5 | 107.6 | 105.1 | 103.3 | 149.1 |
| 12500 | 98.6 | 100.8 | 101.3 | 102.6 | 102.8 | 102.8 | 104.0 | 107.7 | 109.8 | 106.8 | 104.0 | 103.2 | 149.0 | |
| 16000 | 96.1 | 98.4 | 98.9 | 100.1 | 101.6 | 102.4 | 100.8 | 103.3 | 105.5 | 107.1 | 104.2 | 101.6 | 101.3 | 148.4 |
| 20000 | 95.9 | 98.2 | 98.7 | 97.7 | 100.3 | 101.1 | 98.3 | 100.3 | 103.6 | 103.6 | 101.9 | 100.6 | 102.4 | 148.2 |
| 25000 | 90.5 | 95.7 | 95.1 | 94.5 | 97.6 | 97.5 | 95.2 | 94.9 | 99.5 | 102.2 | 98.2 | 94.9 | 96.2 | 147.2 |
| 31500 | 88.5 | 90.7 | 92.2 | 92.9 | 91.9 | 92.6 | 90.7 | 91.4 | 95.6 | 97.4 | 94.0 | 90.7 | 93.7 | 146.2 |
| 40000 | 85.0 | 85.0 | 87.8 | 88.5 | 91.0 | 90.0 | 85.6 | 87.3 | 91.2 | 91.3 | 87.9 | 85.8 | 87.9 | 145.9 |
| 50000 | 82.0 | 81.7 | 83.8 | 81.8 | 82.8 | 82.8 | 80.8 | 79.9 | 89.1 | 85.6 | 82.3 | 79.5 | 81.8 | 144.8 |
| 63000 | 73.9 | 74.0 | 75.4 | 74.6 | 74.2 | 75.2 | 74.8 | 72.8 | 81.9 | 83.0 | 72.3 | 75.3 | 144.2 | |
| 80000 | 64.6 | 64.5 | 66.7 | 70.4 | 67.6 | 69.6 | 67.4 | 67.0 | 72.1 | 73.2 | 68.9 | 62.5 | 65.6 | 142.6 |
| GASPL | 111.9 | 112.4 | 112.3 | 112.1 | 112.6 | 113.5 | 113.5 | 115.6 | 122.4 | 125.1 | 126.9 | 125.1 | 121.1 | 163.2 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 289.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 02-08-78 | TAPE NO. | N292 | ALPHA | SB59 | TAPE | 19.78 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH057 | PAMB | 29.7210 | RELHUM | 49.40 |

| MODEL | TEST POINT | ACUSTIC RANGE | 12.2 M (40.0 FT) | ARC | 132.4 SQ CM (20.52 SQ IN) | MODEL | FREE-JET SPEED |
|-------|------------|---------------|-------------------|-----|----------------------------|-------|--------------------------|
| 0100 | 0105 | | | | | | 88.09 M/SEC (289.0 FPS) |

07/19/79 14.583

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X01055

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 69.0 | 71.5 | 71.8 | 72.2 | 73.4 | 74.6 | 75.1 | 75.6 | 84.1 | 90.8 | 92.9 | 91.7 | 84.9 | 187.1 |
| 63 | 70.1 | 72.5 | 73.6 | 74.0 | 74.6 | 76.2 | 76.6 | 76.8 | 86.3 | 91.8 | 94.3 | 92.0 | 83.5 | 187.9 |
| 80 | 71.7 | 73.2 | 74.5 | 75.3 | 76.4 | 77.3 | 77.6 | 78.9 | 88.5 | 92.8 | 95.2 | 92.6 | 83.2 | 168.8 |
| 100 | 72.2 | 74.2 | 75.8 | 76.7 | 77.4 | 78.4 | 78.6 | 80.2 | 90.3 | 92.6 | 95.3 | 91.7 | 82.6 | 168.8 |
| 125 | 75.0 | 74.5 | 76.5 | 77.7 | 78.3 | 79.4 | 80.1 | 81.7 | 90.7 | 92.3 | 95.5 | 91.1 | 81.4 | 168.9 |
| 160 | 76.2 | 76.1 | 78.1 | 80.2 | 80.9 | 81.5 | 81.0 | 83.2 | 91.4 | 92.2 | 95.1 | 89.9 | 81.0 | 168.9 |
| 200 | 75.7 | 78.8 | 79.8 | 80.0 | 80.7 | 82.4 | 83.1 | 83.8 | 91.9 | 93.6 | 94.0 | 88.9 | 79.9 | 169.0 |
| 250 | 77.4 | 77.2 | 79.0 | 78.7 | 79.8 | 80.7 | 81.1 | 83.8 | 92.0 | 94.7 | 94.4 | 88.1 | 79.9 | 169.5 |
| 315 | 77.8 | 78.3 | 78.7 | 80.5 | 80.1 | 81.5 | 83.1 | 85.1 | 92.1 | 92.8 | 93.2 | 87.1 | 79.5 | 169.1 |
| 400 | 80.3 | 82.3 | 83.5 | 82.0 | 82.5 | 83.9 | 85.6 | 87.0 | 91.6 | 92.5 | 90.8 | 83.6 | 73.5 | 168.5 |
| 500 | 78.5 | 81.6 | 82.8 | 83.4 | 83.0 | 83.0 | 85.2 | 86.2 | 91.1 | 92.7 | 89.9 | 82.0 | 73.7 | 168.6 |
| 630 | 77.8 | 79.9 | 82.0 | 81.5 | 83.0 | 84.2 | 84.1 | 85.3 | 91.8 | 91.7 | 88.2 | 80.8 | 73.0 | 168.6 |
| 800 | 77.4 | 79.1 | 79.6 | 81.1 | 82.1 | 84.1 | 84.4 | 85.3 | 91.2 | 87.0 | 78.5 | 71.2 | 168.5 | |
| 1000 | 76.1 | 78.3 | 80.7 | 80.9 | 82.6 | 83.8 | 84.6 | 86.0 | 89.8 | 89.9 | 84.9 | 77.8 | 68.9 | 168.2 |
| 1250 | 75.3 | 79.0 | 80.3 | 81.3 | 82.9 | 84.4 | 83.5 | 85.4 | 87.8 | 87.5 | 82.2 | 75.7 | 67.0 | 167.5 |
| 1600 | 72.2 | 77.0 | 80.1 | 80.2 | 81.4 | 82.9 | 82.8 | 83.4 | 85.9 | 86.2 | 80.3 | 73.3 | 64.6 | 167.3 |
| 2000 | 68.8 | 74.2 | 76.8 | 79.3 | 81.5 | 82.5 | 80.7 | 82.5 | 83.3 | 82.9 | 76.9 | 69.2 | 59.7 | 166.8 |
| 2500 | 66.8 | 72.8 | 75.7 | 76.2 | 79.6 | 80.7 | 77.6 | 78.8 | 80.6 | 78.3 | 72.8 | 65.4 | 55.9 | 166.8 |
| 3150 | 58.0 | 67.8 | 70.2 | 71.4 | 75.6 | 75.8 | 73.1 | 71.9 | 74.7 | 74.4 | 65.8 | 54.7 | 41.3 | 165.5 |
| 4000 | 49.8 | 58.1 | 63.4 | 66.6 | 66.9 | 68.0 | 65.7 | 65.1 | 66.9 | 64.9 | 55.3 | 41.6 | 24.2 | 164.5 |
| 5000 | 36.6 | 44.9 | 52.9 | 56.8 | 61.0 | 60.6 | 55.6 | 55.6 | 56.2 | 51.1 | 39.4 | 23.0 | | 164.2 |
| 6300 | 15.8 | 27.3 | 36.8 | 39.3 | 42.7 | 43.5 | 40.7 | 37.4 | 41.1 | 31.3 | 16.1 | | | 163.1 |
| 8000 | | | 7.1 | 12.8 | 15.9 | 18.1 | 16.6 | 11.1 | 13.6 | 3.9 | | | | 162.5 |
| 10000 | | | | | | | | | | | | | | 160.9 |

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| | | | | | | | | | | | | | | |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| 0ASPL | 88.3 | 90.4 | 91.8 | 92.5 | 93.4 | 94.5 | 94.5 | 96.1 | 102.5 | 104.1 | 104.7 | 100.5 | 92.0 | 181.4 |
| PNL | 94.5 | 97.6 | 99.8 | 100.9 | 102.6 | 103.7 | 102.7 | 104.1 | 108.3 | 109.1 | 107.7 | 101.7 | 93.0 | |
| PNLT | 94.5 | 97.6 | 100.6 | 101.4 | 104.0 | 104.8 | 103.2 | 104.1 | 109.0 | 109.1 | 107.7 | 101.7 | 94.2 | |

DIAMETER RATIO 8.260 FREQUENCY SHIFT -9

TEST DATE 02-08-78 TAPE NO. N292 ALPHA SB59 TAMB 19.76
LOCATION C41 ANECH CH AERO. RDG. ADH057 PAMB 29.7210 RELHUM 49.40

MODEL TEST POINT 0105 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE FREE-JET SPEED 88.09 M/SEC (289.0 FPS)

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X01060
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

500
63
80
100
125
160
200

| | | | | | | | | | | | | | | |
|-------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 62.3 | 65.3 | 65.1 | 66.2 | 66.6 | 66.7 | 91.1 | 92.6 | 97.6 | 103.1 | 108.5 | 111.7 | 110.9 | 144.7 |
| 315 | 64.0 | 66.1 | 66.0 | 66.1 | 68.0 | 68.0 | 91.0 | 92.6 | 98.4 | 105.7 | 110.1 | 113.3 | 110.2 | 146.0 |
| 400 | 65.8 | 67.1 | 67.7 | 66.9 | 68.5 | 69.9 | 92.3 | 93.7 | 101.2 | 110.0 | 113.2 | 113.8 | 108.6 | 147.7 |
| 500 | 66.2 | 67.5 | 68.9 | 68.5 | 69.9 | 72.0 | 93.6 | 95.5 | 103.5 | 111.4 | 115.2 | 113.9 | 106.8 | 148.8 |
| 630 | 67.6 | 69.1 | 69.9 | 69.6 | 71.5 | 73.6 | 95.0 | 97.7 | 105.4 | 112.5 | 115.8 | 113.0 | 102.7 | 149.3 |
| 800 | 69.1 | 69.4 | 70.9 | 71.9 | 72.5 | 74.6 | 96.5 | 99.5 | 107.7 | 113.0 | 116.9 | 111.1 | 100.7 | 149.8 |
| 1000 | 91.2 | 91.2 | 92.8 | 92.3 | 93.9 | 95.5 | 97.4 | 100.8 | 109.3 | 112.9 | 115.5 | 109.4 | 98.3 | 149.2 |
| 1250 | 90.1 | 93.4 | 94.1 | 94.2 | 95.0 | 97.1 | 98.0 | 101.9 | 109.8 | 113.0 | 115.9 | 108.3 | 98.7 | 149.4 |
| 1600 | 93.4 | 92.5 | 93.3 | 93.8 | 95.2 | 98.0 | 99.7 | 102.8 | 110.7 | 113.2 | 115.1 | 107.3 | 99.1 | 149.4 |
| 2000 | 96.4 | 95.4 | 95.4 | 94.2 | 94.8 | 96.9 | 99.3 | 103.4 | 111.6 | 114.0 | 114.5 | 108.9 | 93.9 | 149.6 |
| 2500 | 98.5 | 100.1 | 99.6 | 97.1 | 96.7 | 98.3 | 100.7 | 104.1 | 111.5 | 115.0 | 114.6 | 107.3 | 93.8 | 150.2 |
| 3150 | 97.1 | 98.6 | 98.9 | 100.9 | 99.0 | 99.3 | 101.0 | 105.4 | 112.0 | 114.3 | 114.7 | 108.1 | 100.4 | 150.3 |
| 4000 | 95.1 | 96.2 | 97.5 | 98.2 | 100.0 | 100.7 | 101.0 | 104.7 | 111.6 | 113.4 | 113.5 | 106.4 | 98.7 | 149.6 |
| 5000 | 95.2 | 96.1 | 96.6 | 96.8 | 98.9 | 101.3 | 102.2 | 105.3 | 111.5 | 113.5 | 112.4 | 105.3 | 97.5 | 149.5 |
| 6300 | 95.7 | 96.9 | 97.4 | 97.1 | 98.6 | 100.7 | 102.7 | 105.4 | 110.8 | 112.5 | 110.8 | 103.8 | 97.0 | 148.8 |
| 8000 | 95.9 | 97.7 | 96.9 | 97.2 | 98.5 | 100.2 | 101.7 | 105.1 | 110.5 | 111.4 | 109.9 | 103.1 | 95.1 | 148.5 |
| 10000 | 93.5 | 96.1 | 97.3 | 97.4 | 99.0 | 100.9 | 101.5 | 105.1 | 109.7 | 110.2 | 108.1 | 101.9 | 95.3 | 148.2 |
| 12500 | 91.0 | 94.2 | 94.8 | 95.9 | 98.5 | 100.1 | 100.1 | 103.4 | 107.3 | 108.1 | 105.5 | 100.3 | 94.3 | 147.0 |
| 16000 | 90.3 | 93.3 | 93.9 | 94.9 | 97.9 | 99.4 | 98.8 | 101.7 | 105.6 | 106.8 | 103.5 | 98.0 | 94.0 | 146.9 |
| 20000 | 85.0 | 90.6 | 91.4 | 92.7 | 96.5 | 97.9 | 96.0 | 98.8 | 102.4 | 103.4 | 100.1 | 96.6 | 91.9 | 145.8 |
| 25000 | 84.3 | 86.7 | 89.4 | 89.5 | 93.9 | 94.5 | 92.6 | 94.1 | 99.4 | 98.7 | 96.3 | 93.0 | 90.1 | 144.5 |
| 31500 | 83.1 | 83.9 | 86.6 | 88.0 | 89.1 | 89.6 | 89.0 | 91.5 | 95.2 | 97.5 | 93.5 | 88.6 | 84.9 | 144.5 |
| 40000 | 78.6 | 79.6 | 81.8 | 83.1 | 86.8 | 87.0 | 83.9 | 85.9 | 90.3 | 87.7 | 82.8 | 80.5 | 143.4 | |
| 50000 | 71.6 | 72.4 | 74.7 | 77.1 | 79.1 | 80.1 | 78.8 | 78.7 | 85.0 | 83.4 | 81.5 | 77.3 | 74.4 | 141.3 |
| 63000 | 65.3 | 66.4 | 68.6 | 70.7 | 71.1 | 71.7 | 72.8 | 71.9 | 80.5 | 77.4 | 73.7 | 70.7 | 68.0 | 140.5 |
| 80000 | 59.5 | 59.2 | 62.2 | 65.4 | 63.7 | 66.3 | 65.1 | 66.3 | 73.6 | 71.1 | 68.4 | 62.4 | 60.1 | 140.9 |

0ASPL 106.4 107.8 108.2 108.4 109.7 111.3 112.3 115.6 122.1 124.9 126.3 122.4 116.6 162.0

TEST DATE 02-08-78 TAPE NO. N292 ALPHA SB59 TAMB 19.76
LOCATION C41 ANECH CH AERO. RDG. ADH058 PAMB 29.7190 RELHUM 49.40

MODEL TEST POINT Q106 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 132.4 SQ CM (20.52 SQ IN) - MODEL 117.04 M/SEC (384.0 FPS)
FREE-JET SPEED

ORIGINAL PAGE IS
OF POOR QUALITY

07/19/79 14.393

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X01060

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 89.1 | 91.0 | 89.5 | 89.1 | 88.2 | 88.7 | 89.3 | 89.3 | 95.0 | 101.5 | 105.4 | 109.0 | 107.7 | 142.1 |
| 315 | 89.1 | 91.0 | 89.5 | 89.1 | 88.2 | 88.7 | 89.3 | 89.3 | 95.0 | 101.5 | 105.4 | 109.0 | 107.7 | 142.1 |
| 400 | 90.9 | 91.9 | 90.6 | 89.2 | 90.1 | 91.1 | 91.5 | 92.0 | 101.5 | 108.9 | 112.9 | 113.1 | 108.5 | 147.1 |
| 500 | 91.9 | 92.4 | 91.9 | 89.8 | 91.6 | 92.3 | 92.7 | 93.5 | 103.3 | 110.0 | 113.6 | 112.9 | 107.2 | 147.6 |
| 630 | 93.1 | 93.4 | 93.5 | 91.7 | 96.4 | 94.0 | 94.0 | 95.5 | 105.9 | 110.8 | 115.1 | 112.0 | 107.7 | 148.5 |
| 800 | 94.9 | 95.2 | 94.7 | 93.0 | 94.4 | 95.1 | 95.6 | 97.3 | 108.0 | 111.3 | 114.5 | 111.7 | 108.9 | 148.6 |
| 1000 | 96.9 | 95.2 | 95.5 | 95.2 | 95.8 | 96.1 | 96.6 | 98.8 | 108.5 | 111.4 | 114.8 | 110.4 | 108.1 | 148.7 |
| 1250 | 97.6 | 96.8 | 97.2 | 95.5 | 97.2 | 97.9 | 97.3 | 100.0 | 109.7 | 111.8 | 114.3 | 109.7 | 108.7 | 148.8 |
| 1600 | 97.4 | 99.6 | 99.1 | 97.7 | 97.5 | 99.0 | 99.2 | 101.1 | 110.7 | 112.9 | 113.8 | 109.4 | 108.5 | 149.2 |
| 2000 | 100.4 | 98.6 | 98.2 | 97.4 | 96.8 | 98.1 | 99.0 | 101.9 | 111.1 | 114.2 | 114.4 | 110.3 | 110.0 | 150.1 |
| 2500 | 102.0 | 101.1 | 99.2 | 97.0 | 98.9 | 99.8 | 100.8 | 102.9 | 112.2 | 114.2 | 115.2 | 112.0 | 111.5 | 150.9 |
| 3150 | 104.4 | 105.0 | 103.6 | 100.1 | 101.9 | 101.2 | 101.5 | 104.7 | 112.3 | 113.8 | 114.4 | 110.4 | 109.8 | 150.6 |
| 4000 | 103.0 | 104.1 | 103.6 | 104.7 | 103.5 | 103.0 | 102.1 | 104.5 | 112.3 | 113.9 | 113.0 | 108.9 | 107.7 | 150.6 |
| 5000 | 102.3 | 102.6 | 102.9 | 102.6 | 102.8 | 104.2 | 103.6 | 105.4 | 111.7 | 112.9 | 111.5 | 107.5 | 107.4 | 150.0 |
| 6300 | 102.4 | 102.5 | 102.2 | 101.5 | 102.6 | 103.7 | 104.1 | 105.5 | 111.6 | 112.0 | 110.8 | 106.9 | 106.6 | 149.7 |
| 8000 | 102.7 | 103.1 | 102.8 | 101.7 | 102.5 | 103.2 | 103.2 | 105.2 | 110.9 | 110.9 | 109.1 | 105.8 | 105.9 | 149.4 |
| 10000 | 102.7 | 103.9 | 102.2 | 101.6 | 102.9 | 103.9 | 103.0 | 105.2 | 109.1 | 109.5 | 107.5 | 105.5 | 106.7 | 149.1 |
| 12500 | 100.0 | 101.9 | 102.3 | 101.5 | 103.0 | 103.1 | 101.9 | 103.8 | 108.3 | 109.2 | 106.4 | 105.3 | 107.5 | 149.3 |
| 16000 | 99.7 | 101.6 | 101.0 | 100.6 | 102.4 | 102.4 | 100.8 | 102.4 | 105.1 | 106.9 | 104.2 | 104.0 | 106.3 | 149.1 |
| 20000 | 98.5 | 100.4 | 99.6 | 99.2 | 101.0 | 100.9 | 98.3 | 100.0 | 104.4 | 103.4 | 101.3 | 100.9 | 104.7 | 148.8 |
| 25000 | 92.7 | 97.1 | 96.5 | 96.4 | 98.4 | 97.5 | 95.0 | 95.8 | 99.8 | 101.8 | 98.5 | 96.8 | 100.3 | 147.8 |
| 31500 | 91.2 | 92.4 | 93.8 | 92.4 | 93.1 | 92.6 | 91.1 | 92.3 | 96.9 | 97.1 | 94.7 | 92.9 | 97.5 | 147.1 |
| 40000 | 86.5 | 86.6 | 88.5 | 89.0 | 91.3 | 90.0 | 86.3 | 87.5 | 92.0 | 90.4 | 89.0 | 87.8 | 91.8 | 146.5 |
| 50000 | 84.2 | 84.1 | 84.9 | 84.7 | 83.6 | 83.1 | 81.2 | 80.4 | 88.1 | 84.9 | 81.8 | 82.1 | 86.4 | 145.7 |
| 63000 | 76.3 | 75.9 | 76.8 | 77.8 | 75.0 | 74.7 | 75.1 | 73.3 | 82.2 | 79.4 | 77.3 | 74.6 | 79.6 | 144.2 |
| 80000 | 65.8 | 66.3 | 67.6 | 68.8 | 68.2 | 69.3 | 67.4 | 67.4 | 72.4 | 69.6 | 67.5 | 64.8 | 69.8 | 142.2 |
| GASPL | 113.1 | 113.7 | 113.1 | 112.4 | 113.3 | 113.6 | 113.2 | 115.2 | 122.3 | 124.4 | 125.5 | 122.9 | 121.3 | 162.7 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 384.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 02-08-78 | TAPE NO. | N292 | ALPHA | SB59 | TAMB | 19.78 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH058 | PAMB | 29.7190 | RELHUM | 49.40 |

| MODEL | TEST POINT | ACOUSTIC RANGE | 12.2 M (40.0 FT) | ARC | 132.4 SQ CM (20.52 SQ IN) | SIZE | FREE-JET SPEED |
|-------|------------|----------------|-------------------|-----|----------------------------|------|---------------------------|
| 0100 | 0106 | | | | | | 117.04 M/SEC (384.0 FPS) |

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X01065

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 69.8 | 72.3 | 72.1 | 71.5 | 72.7 | 73.9 | 74.1 | 74.2 | 83.0 | 89.3 | 91.8 | 89.8 | 81.9 | 165.6 |
| 63 | 70.8 | 72.8 | 73.4 | 72.0 | 74.2 | 75.0 | 75.3 | 75.7 | 84.8 | 90.4 | 92.5 | 89.5 | 80.5 | 166.0 |
| 80 | 72.0 | 73.7 | 74.9 | 73.9 | 78.9 | 76.7 | 76.6 | 77.6 | 87.3 | 91.2 | 93.9 | 88.5 | 80.9 | 166.9 |
| 100 | 73.6 | 75.5 | 76.0 | 75.1 | 76.9 | 77.8 | 78.1 | 79.4 | 89.4 | 91.6 | 93.2 | 88.2 | 81.9 | 167.0 |
| 125 | 75.5 | 75.4 | 76.8 | 77.3 | 78.3 | 78.7 | 79.0 | 80.8 | 89.8 | 91.6 | 93.4 | 88.8 | 80.9 | 167.0 |
| 160 | 76.0 | 76.8 | 78.4 | 77.4 | 79.5 | 80.3 | 79.7 | 81.9 | 90.8 | 91.9 | 92.7 | 85.8 | 81.2 | 167.2 |
| 200 | 75.6 | 79.4 | 80.1 | 79.5 | 79.6 | 81.3 | 81.4 | 82.8 | 91.7 | 92.7 | 92.0 | 85.2 | 80.5 | 167.6 |
| 250 | 78.3 | 78.1 | 78.9 | 79.0 | 78.7 | 80.2 | 81.0 | 83.4 | 91.8 | 93.8 | 92.3 | 85.7 | 81.4 | 168.4 |
| 315 | 79.5 | 80.4 | 79.6 | 78.3 | 80.6 | 81.6 | 82.5 | 84.2 | 92.6 | 93.4 | 92.7 | 86.8 | 82.0 | 169.3 |
| 400 | 81.4 | 83.9 | 83.7 | 81.1 | 83.3 | 82.8 | 82.9 | 85.7 | 92.4 | 92.6 | 91.4 | 84.8 | 79.3 | 169.1 |
| 500 | 79.5 | 82.5 | 83.4 | 85.3 | 84.7 | 84.3 | 83.2 | 85.2 | 92.1 | 92.3 | 89.5 | 82.3 | 78.3 | 168.9 |
| 630 | 78.3 | 80.7 | 82.4 | 83.0 | 83.7 | 85.3 | 84.5 | 85.8 | 91.1 | 91.0 | 87.5 | 80.3 | 74.9 | 168.3 |
| 800 | 77.8 | 80.2 | 81.3 | 81.6 | 83.2 | 84.5 | 84.3 | 85.5 | 90.7 | 89.6 | 86.3 | 78.0 | 72.8 | 168.1 |
| 1000 | 77.7 | 80.5 | 81.8 | 81.6 | 83.0 | 83.8 | 83.7 | 85.1 | 89.8 | 88.3 | 84.2 | 77.3 | 71.1 | 167.7 |
| 1250 | 77.2 | 80.9 | 80.8 | 81.4 | 83.3 | 84.4 | 83.3 | 84.9 | 87.8 | 86.6 | 82.0 | 78.1 | 70.4 | 167.5 |
| 1600 | 73.7 | 78.4 | 80.5 | 80.9 | 83.0 | 83.4 | 82.0 | 86.5 | 86.5 | 80.1 | 74.5 | 68.9 | 167.7 | |
| 2000 | 72.4 | 77.5 | 78.8 | 79.8 | 82.3 | 82.5 | 80.7 | 81.5 | 83.9 | 82.7 | 76.9 | 71.8 | 64.7 | 167.5 |
| 2500 | 69.4 | 75.0 | 76.6 | 77.7 | 80.4 | 80.5 | 77.6 | 78.5 | 81.4 | 78.0 | 72.2 | 65.7 | 58.1 | 167.1 |
| 3150 | 60.2 | 69.3 | 71.6 | 73.4 | 76.4 | 75.8 | 73.0 | 72.8 | 74.9 | 74.0 | 66.0 | 56.7 | 45.4 | 166.2 |
| 4000 | 52.5 | 59.8 | 65.1 | 66.1 | 68.0 | 68.0 | 66.1 | 66.0 | 68.1 | 64.5 | 56.0 | 43.9 | 28.1 | 165.4 |
| 5000 | 38.0 | 46.5 | 53.6 | 57.2 | 61.3 | 60.6 | 56.2 | 55.7 | 57.1 | 50.2 | 40.5 | 25.1 | 0.5 | 164.8 |
| 6300 | 18.0 | 29.7 | 37.9 | 42.2 | 43.5 | 43.8 | 41.1 | 37.9 | 41.1 | 30.6 | 15.6 | | | 164.0 |
| 8000 | | | 8.5 | 16.0 | 16.8 | 17.6 | 16.9 | 11.6 | 13.8 | 0.3 | | | | 162.8 |
| 10000 | | | | | | | | | | | | | | 160.8 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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ASPL 89.3 91.7 92.5 92.6 94.0 94.6 94.1 95.6 102.3 103.3 103.2 97.8 91.5 180.9
PNL 95.8 99.3 100.7 101.2 103.3 103.6 102.4 103.5 108.5 108.6 106.8 100.6 94.7
PNLT 95.8 99.3 101.4 102.3 104.5 104.7 102.9 103.6 108.1 109.2 107.8 100.6 98.8

DIAMETER RATIO 8.260 FREQUENCY SHIFT -9

TEST DATE 02-08-78 TAPE NO. N292 ALPHA SB59 TAMS 19.76
LOCATION C41 ANECH CH AERO. RDG. ADH058 PAMB 29.7190 RELHUM 49.40

MODEL TEST POINT ACQUSTIC RANGE SIZE FREE-JET SPEED
0100 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.04 M/SEC (384.0 FPS)

07/19/79 18.690

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARCIDENTIFICATION - MODEL FJ-ZER-FM00L X01070
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. FNL

FREQ

50

63

90

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12300

16000

20000

25000

31500

40000

50000

63000

80000

0A3PL

59.2

101.9

102.6

104.4

106.2

109.8

114.4

116.0

117.2

118.5

117.5

155.0

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OF POOR QUALITY

TEST DATE 02-07-78

LOCATION C41 ANECH CH

TAPE NO. M291

AERO. RDG. ADH051

ALPHA 5859

PAMB 29.6989

TAPB 14.36

RELHMH 46.3C

MODEL TEST POINT

0100 0107

ACOUSTIC RANGE

12.2 M (40.0 FT) ARC

SIZE

132.4 SQ CM (20.52 SQ IN) - MODEL

FREE-JET SPEED

0. M/SEC (0. FPS)

50

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X01070

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | | | | | | | | | | | | | | |
| 315 | 79.0 | 84.8 | 82.8 | 82.9 | 84.5 | 86.8 | 88.2 | 89.9 | 94.8 | 99.4 | 103.8 | 106.5 | 107.1 | 140.2 |
| 400 | 80.4 | 83.7 | 83.9 | 84.5 | 86.3 | 87.9 | 88.6 | 90.7 | 96.7 | 101.0 | 104.6 | 108.1 | 107.6 | 141.4 |
| 500 | 82.2 | 84.9 | 85.2 | 84.5 | 86.3 | 88.2 | 89.1 | 91.3 | 98.7 | 104.3 | 107.4 | 109.1 | 107.5 | 143.0 |
| 630 | 83.5 | 85.0 | 86.6 | 85.6 | 87.7 | 89.3 | 89.9 | 92.6 | 98.3 | 104.9 | 107.8 | 109.1 | 107.8 | 143.4 |
| 800 | 83.6 | 86.9 | 87.2 | 86.9 | 84.0 | 90.4 | 91.5 | 94.7 | 100.9 | 105.2 | 107.9 | 108.6 | 107.4 | 143.5 |
| 1000 | 86.6 | 86.9 | 88.2 | 86.7 | 90.1 | 91.7 | 92.6 | 95.7 | 101.8 | 105.5 | 106.9 | 107.1 | 106.2 | 142.8 |
| 1250 | 88.0 | 89.3 | 90.6 | 89.6 | 90.4 | 92.8 | 93.9 | 96.6 | 103.1 | 105.1 | 105.5 | 105.2 | 104.3 | 142.1 |
| 1600 | 86.9 | 90.9 | 91.2 | 90.2 | 91.3 | 93.9 | 94.5 | 97.7 | 102.8 | 104.5 | 105.4 | 105.0 | 102.9 | 141.9 |
| 2000 | 88.2 | 89.3 | 90.3 | 90.6 | 91.7 | 94.3 | 95.2 | 98.1 | 103.2 | 104.7 | 105.1 | 104.1 | 102.8 | 141.9 |
| 2500 | 88.6 | 90.9 | 91.4 | 90.9 | 91.3 | 93.4 | 95.0 | 98.2 | 103.3 | 104.5 | 104.0 | 103.4 | 102.2 | 141.6 |
| 3150 | 87.8 | 90.1 | 91.1 | 91.3 | 91.9 | 94.3 | 95.9 | 98.8 | 102.7 | 103.7 | 102.9 | 104.1 | 102.8 | 141.4 |
| 4000 | 86.3 | 91.8 | 91.6 | 91.8 | 92.9 | 94.3 | 95.7 | 99.3 | 103.5 | 102.7 | 102.4 | 104.1 | 103.3 | 141.4 |
| 5000 | 89.3 | 91.3 | 91.4 | 90.9 | 92.2 | 94.0 | 95.4 | 98.9 | 102.8 | 102.0 | 101.6 | 104.6 | 103.3 | 141.2 |
| 6300 | 88.8 | 90.7 | 91.2 | 90.9 | 92.5 | 94.4 | 95.7 | 98.9 | 102.8 | 102.3 | 102.2 | 104.6 | 103.4 | 141.5 |
| 8000 | 87.5 | 90.9 | 92.1 | 91.6 | 92.7 | 95.3 | 95.9 | 98.4 | 102.8 | 102.0 | 102.3 | 104.6 | 103.1 | 141.7 |
| 10000 | 84.7 | 85.5 | 90.4 | 90.3 | 92.9 | 95.3 | 95.0 | 97.5 | 101.1 | 100.8 | 100.0 | 102.1 | 101.5 | 141.1 |
| 12500 | 81.8 | 86.3 | 88.0 | 89.4 | 91.4 | 93.3 | 93.3 | 96.1 | 98.7 | 99.0 | 97.7 | 99.6 | 98.8 | 139.8 |
| 16000 | 80.0 | 85.2 | 87.0 | 88.6 | 91.3 | 92.8 | 92.3 | 94.9 | 97.3 | 97.9 | 96.1 | 97.5 | 96.4 | 139.8 |
| 20000 | 74.0 | 82.5 | 84.0 | 85.9 | 90.5 | 91.8 | 90.0 | 92.0 | 94.3 | 94.5 | 92.3 | 94.3 | 93.9 | 138.3 |
| 25000 | 72.8 | 78.8 | 81.8 | 81.9 | 87.1 | 88.7 | 86.5 | 87.0 | 91.8 | 89.8 | 88.7 | 90.5 | 91.3 | 137.7 |
| 31500 | 70.3 | 75.0 | 79.0 | 80.9 | 82.0 | 82.8 | 82.4 | 83.9 | 87.8 | 88.5 | 86.2 | 84.5 | 84.6 | 137.1 |
| 40000 | 65.8 | 69.7 | 73.4 | 75.2 | 80.0 | 80.7 | 77.0 | 79.0 | 82.4 | 82.8 | 80.8 | 79.3 | 79.7 | 136.3 |
| 50000 | 58.3 | 62.8 | 66.0 | 68.8 | 71.5 | 73.0 | 71.9 | 71.6 | 77.6 | 75.5 | 74.1 | 74.2 | 74.1 | 134.2 |
| 63000 | 53.0 | 57.3 | 59.9 | 62.1 | 63.5 | 64.6 | 65.7 | 65.2 | 73.3 | 68.7 | 67.5 | 67.9 | 68.0 | 133.5 |
| 80000 | 47.1 | 50.8 | 54.0 | 57.6 | 56.5 | 59.7 | 58.7 | 59.4 | 66.2 | 62.1 | 63.0 | 60.2 | 60.0 | 133.8 |
| GASPL | 99.2 | 101.9 | 102.6 | 102.6 | 104.4 | 106.2 | 106.9 | 109.8 | 114.4 | 116.0 | 117.2 | 118.5 | 117.5 | 155.0 |

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-07-78 TAPE NO. N291 ALPHA SB69 TAMB 14.36
 LOCATION C41 ANECH CH AERO. RDG. ADH051 PAMB 29.6989 RELHUM 46.30

MODEL TEST POINT 0107 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 132.4 SQ CM (20.62 SQ IN) - MODEL SIZE 0. FREE-JET SPEED M/SEC (0. FPS)

ORIGINAL PAGE IS
OF POOR QUALITY

07/19/79 18.890

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT] SL

IDENTIFICATION - FJ-ZER-FMODL X01075

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 61.1 | 65.4 | 66.7 | 66.7 | 69.0 | 71.0 | 71.7 | 73.5 | 80.2 | 84.7 | 86.3 | 85.8 | 80.9 | 161.3 |
| 53 | 62.4 | 65.4 | 68.0 | 67.8 | 70.3 | 72.0 | 72.5 | 74.8 | 80.3 | 85.3 | 86.6 | 86.1 | 81.1 | 161.7 |
| 80 | 62.4 | 67.3 | 68.6 | 69.1 | 76.6 | 73.1 | 74.1 | 76.9 | 82.4 | 85.6 | 86.7 | 85.4 | 80.6 | 161.8 |
| 100 | 65.4 | 67.2 | 69.6 | 70.8 | 72.6 | 74.4 | 75.1 | 77.8 | 83.3 | 85.8 | 85.6 | 83.6 | 79.3 | 161.2 |
| 125 | 66.6 | 69.5 | 71.9 | 71.6 | 72.9 | 75.4 | 76.4 | 78.6 | 84.4 | 85.3 | 84.1 | 81.5 | 77.2 | 160.5 |
| 160 | 65.3 | 71.0 | 72.3 | 72.1 | 73.6 | 76.4 | 76.9 | 79.6 | 84.0 | 84.6 | 83.8 | 81.1 | 75.4 | 160.3 |
| 200 | 66.4 | 69.2 | 71.3 | 72.4 | 73.9 | 76.6 | 77.4 | 79.9 | 84.2 | 84.5 | 83.3 | 79.9 | 74.8 | 160.3 |
| 250 | 66.5 | 70.5 | 72.2 | 72.5 | 73.3 | 75.5 | 77.0 | 79.7 | 84.1 | 84.1 | 81.8 | 78.8 | 73.5 | 159.9 |
| 315 | 65.2 | 69.3 | 71.5 | 72.6 | 73.6 | 76.1 | 77.6 | 80.1 | 83.2 | 82.9 | 80.3 | 78.8 | 73.3 | 159.7 |
| 400 | 65.2 | 70.6 | 71.7 | 72.8 | 74.3 | 75.8 | 77.1 | 80.3 | 83.6 | 81.5 | 79.3 | 78.2 | 72.8 | 159.8 |
| 500 | 65.7 | 69.8 | 71.1 | 71.5 | 73.3 | 75.3 | 76.6 | 79.5 | 82.5 | 80.4 | 78.1 | 78.1 | 71.9 | 153.5 |
| 630 | 64.8 | 68.7 | 70.6 | 71.3 | 73.4 | 75.4 | 76.6 | 79.3 | 82.3 | 80.4 | 78.2 | 77.4 | 70.9 | 159.8 |
| 800 | 63.0 | 68.5 | 71.3 | 71.7 | 73.3 | 76.1 | 76.6 | 78.5 | 81.9 | 79.6 | 77.8 | 76.7 | 68.4 | 160.0 |
| 1000 | 62.2 | 67.3 | 69.5 | 70.9 | 73.3 | 75.6 | 76.0 | 77.7 | 80.9 | 78.8 | 76.2 | 74.8 | 68.1 | 159.7 |
| 1250 | 59.3 | 65.5 | 69.1 | 70.1 | 73.3 | 75.9 | 75.3 | 77.3 | 79.8 | 77.8 | 74.6 | 72.8 | 65.3 | 159.4 |
| 1600 | 55.4 | 62.7 | 66.2 | 68.8 | 71.5 | 73.6 | 73.3 | 75.3 | 77.0 | 75.4 | 71.4 | 68.8 | 60.2 | 158.1 |
| 2000 | 52.7 | 61.0 | 64.9 | 67.8 | 71.2 | 72.9 | 72.2 | 74.0 | 75.1 | 73.8 | 68.8 | 65.1 | 54.8 | 158.2 |
| 2500 | 44.9 | 57.1 | 61.0 | 64.4 | 69.8 | 71.4 | 69.3 | 70.6 | 71.3 | 69.1 | 63.2 | 59.2 | 47.3 | 157.2 |
| 3150 | 40.3 | 51.0 | 56.9 | 58.9 | 65.0 | 67.0 | 64.5 | 63.9 | 66.9 | 62.0 | 56.2 | 50.3 | 36.4 | 156.0 |
| 4000 | 31.6 | 42.5 | 50.3 | 54.6 | 57.0 | 58.2 | 57.4 | 57.6 | 59.1 | 56.0 | 47.5 | 35.4 | 15.2 | 155.4 |
| 5000 | 17.3 | 29.6 | 38.5 | 43.4 | 50.0 | 51.2 | 47.0 | 47.2 | 47.5 | 42.7 | 32.4 | 18.5 | 154.6 | |
| 6300 | 8.4 | 19.0 | 26.2 | 31.4 | 33.7 | 31.8 | 29.1 | 30.5 | 21.1 | 7.9 | | | 152.5 | |
| 8000 | | | | | | | | | | | | | 151.8 | |
| 10000 | | | | | | | | | | | | | 152.2 | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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QASPL 76.4 80.6 82.6 83.3 85.7 87.5 88.2 90.6 94.6 95.3 94.9 93.4 88.3 173.0
PWL 80.3 85.8 88.3 90.3 93.6 95.4 95.1 97.1 100.0 99.1 97.0 94.9 88.6
PWL 80.3 85.8 88.5 90.3 94.9 96.6 95.6 97.1 100.0 99.1 98.1 94.9 89.7

DIAMETER RATIO 8.260 FREQUENCY SHIFT -9

TEST DATE 02-07-78 TAPE NO. N291 IALPHA SB59 TAMB 14.36
LOCATION C41 ANECH CH AERO. RDG. ADH051 PAMB 29.6989 RELHUM 46.30

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
0100 0107 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)

07/19/79 14.663

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X01080
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

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TEST DATE 02-08-78 TAPE NO. N292 ALPHA SB59 TAMB 22.10
LOCATION C41 ANECH CH AERO. RDG. ADH062 PAMB 29.6620 RELHUM 48.40

MODEL TEST POINT 0108 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 132.4 SQ CM (20.52 SQ IN) - MODEL 86.09 M/SEC (289.0 M/SEC) FREE-JET SPEED

07/19/79 14.663

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X01050

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

101.5

102.6

102.9

104.0

105.0

106.3

111.5

111.8

111.2

109.4

106.9

151.4

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 289.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-08-78 TAPE NO. N292 ALPHA SB59 TAMB 22.10
LOCATION C41 ANECH CH AERO. RDG. ADH062 PAMB 29.6620 RELHUM 48.40

MODEL TEST POINT 0100 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 132.4 SQ CH (20.62 SQ IN) - MODEL 88.09 M/SEC (289.0 FPS) FREE-JET SPEED

07/19/79 14.883

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X01085

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PML |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 60.3 | 64.0 | 64.0 | 63.6 | 64.8 | 65.8 | 66.5 | 67.6 | 74.3 | 78.7 | 79.8 | 78.2 | 70.7 | 184.3 |
| 63 | 61.0 | 64.2 | 65.6 | 65.9 | 67.0 | 67.4 | 67.4 | 67.6 | 76.3 | 78.7 | 79.1 | 76.3 | 67.4 | 183.7 |
| 80 | 62.4 | 64.9 | 65.8 | 67.6 | 73.5 | 68.5 | 68.5 | 70.0 | 77.4 | 79.5 | 79.4 | 73.8 | 64.6 | 184.0 |
| 100 | 64.9 | 67.8 | 68.8 | 68.6 | 68.7 | 69.8 | 69.7 | 71.4 | 79.0 | 80.1 | 78.4 | 71.7 | 63.4 | 184.1 |
| 125 | 65.4 | 66.6 | 68.0 | 68.6 | 69.5 | 70.9 | 71.3 | 72.3 | 79.3 | 79.7 | 78.2 | 70.3 | 62.4 | 184.2 |
| 160 | 66.4 | 67.3 | 69.7 | 70.4 | 70.9 | 72.0 | 71.9 | 73.1 | 79.7 | 79.4 | 78.0 | 69.5 | 62.6 | 184.5 |
| 200 | 65.6 | 69.5 | 70.7 | 70.5 | 71.2 | 73.1 | 73.0 | 74.7 | 80.1 | 79.3 | 76.0 | 68.0 | 61.7 | 184.6 |
| 250 | 67.4 | 68.4 | 70.0 | 70.5 | 70.4 | 72.4 | 73.1 | 74.3 | 79.7 | 79.2 | 75.9 | 68.2 | 61.2 | 184.6 |
| 315 | 66.7 | 69.0 | 70.6 | 71.0 | 72.0 | 72.5 | 74.0 | 74.6 | 80.4 | 77.5 | 74.4 | 66.6 | 59.9 | 184.7 |
| 400 | 66.6 | 69.2 | 70.2 | 71.6 | 72.2 | 73.7 | 74.1 | 75.5 | 79.8 | 76.9 | 73.2 | 66.0 | 58.2 | 184.9 |
| 500 | 66.6 | 69.4 | 70.5 | 71.5 | 72.2 | 73.8 | 74.2 | 75.2 | 80.1 | 77.2 | 73.3 | 65.7 | 58.1 | 185.5 |
| 630 | 65.9 | 69.2 | 70.8 | 72.1 | 72.6 | 74.3 | 74.9 | 76.1 | 80.1 | 77.6 | 73.9 | 67.0 | 59.7 | 186.4 |
| 800 | 66.9 | 69.2 | 70.7 | 72.4 | 73.2 | 75.7 | 75.9 | 80.2 | 77.7 | 73.5 | 67.2 | 59.2 | 187.1 | |
| 1000 | 66.6 | 69.6 | 71.3 | 72.7 | 74.2 | 75.4 | 76.7 | 76.3 | 80.1 | 77.9 | 72.9 | 67.2 | 58.8 | 187.9 |
| 1250 | 64.8 | 68.8 | 70.4 | 72.4 | 74.5 | 76.2 | 74.8 | 76.4 | 78.1 | 76.5 | 70.6 | 65.2 | 57.2 | 187.6 |
| 1600 | 63.8 | 67.7 | 70.0 | 71.9 | 73.6 | 74.7 | 73.8 | 75.0 | 76.8 | 75.3 | 69.0 | 63.0 | 54.3 | 187.7 |
| 2000 | 61.8 | 67.2 | 68.6 | 71.2 | 73.6 | 74.6 | 72.0 | 73.8 | 75.0 | 72.2 | 65.7 | 59.8 | 51.6 | 188.0 |
| 2500 | 58.1 | 65.2 | 67.6 | 68.3 | 72.5 | 72.8 | 70.3 | 71.1 | 73.0 | 68.2 | 61.3 | 55.0 | 46.4 | 188.2 |
| 3150 | 49.4 | 59.2 | 61.9 | 63.8 | 68.2 | 68.4 | 66.2 | 65.4 | 66.5 | 63.7 | 54.3 | 44.3 | 31.0 | 187.0 |
| 4000 | 41.2 | 49.8 | 55.1 | 58.3 | 59.3 | 59.9 | 59.0 | 58.9 | 58.6 | 53.7 | 44.2 | 30.6 | 12.1 | 185.8 |
| 5000 | 26.7 | 36.6 | 44.5 | 48.2 | 52.7 | 53.0 | 48.4 | 48.2 | 47.9 | 38.8 | 27.7 | 11.2 | | 185.4 |
| 6300 | 5.4 | 18.5 | 28.2 | 31.2 | 34.6 | 35.6 | 33.5 | 29.6 | 31.3 | 17.5 | 3.5 | | | 183.9 |
| 8000 | | | | | | | | | | | | | | 182.5 |
| 10000 | | | | | | | | | | | | | | 181.5 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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OASPL 77.7 80.6 82.1 83.2 84.7 85.8 86.6 86.7 91.3 90.5 88.5 83.3 75.4 169.5
 PNL 84.1 88.5 90.7 92.1 94.5 95.3 94.2 95.1 98.2 96.4 91.6 84.9 75.3
 PNL 84.1 88.5 90.7 92.6 95.0 96.5 94.8 95.1 98.6 96.4 91.6 84.9 77.5

DIAMETER RATIO 8.260 FREQUENCY SHIFT -9

TEST DATE 02-08-78 TAPE NO. N292 IALPHA 8859 TAMB 22.10
 LOCATION C41 ANECH CH AERO. RDG. ADH062 PAMB 29.6820 RELHUM 46.40

MODEL TEST POINT 0108 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CH (1400.00 SQ IN) - FULL SIZE 88.09 M/SEC (289.0 FPS) FREE-JET SPEED

07/19/79 14.003

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FM00L X01090
BACKGROUND FJB400-FM00L X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. FWL

FREQ

50

63

80

100

125

160

200

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 73.5 | 76.6 | 76.3 | 77.4 | 77.3 | 79.8 | 91.7 | 83.2 | 88.9 | 92.9 | 97.7 | 100.9 | 99.9 | 134.0 |
| 315 | 75.3 | 77.2 | 77.5 | 77.8 | 78.7 | 80.8 | 81.3 | 83.7 | 90.1 | 94.9 | 98.9 | 101.3 | 98.0 | 134.8 |
| 400 | 77.2 | 78.5 | 78.8 | 78.2 | 79.1 | 81.4 | 82.5 | 84.5 | 91.7 | 96.0 | 100.4 | 100.6 | 95.2 | 135.2 |
| 500 | 77.1 | 78.7 | 78.5 | 79.4 | 82.1 | 82.3 | 83.8 | 85.5 | 92.9 | 99.1 | 101.2 | 99.4 | 91.3 | 135.5 |
| 630 | 78.1 | 79.3 | 80.8 | 80.3 | 90.7 | 83.8 | 85.0 | 88.0 | 94.8 | 99.4 | 100.8 | 96.2 | 87.9 | 135.4 |
| 800 | 80.2 | 80.2 | 81.4 | 82.7 | 83.3 | 85.2 | 86.9 | 89.6 | 96.4 | 100.7 | 100.4 | 93.5 | 87.1 | 135.7 |
| 1000 | 81.6 | 80.9 | 82.9 | 82.4 | 83.7 | 86.1 | 87.8 | 90.5 | 97.7 | 100.3 | 99.0 | 90.3 | 84.0 | 135.4 |
| 1250 | 80.7 | 83.3 | 84.5 | 84.0 | 84.9 | 87.5 | 88.9 | 91.9 | 97.8 | 100.0 | 98.6 | 89.4 | 83.9 | 135.4 |
| 1600 | 83.6 | 82.9 | 84.5 | 84.7 | 86.1 | 88.7 | 89.6 | 92.5 | 98.4 | 99.6 | 98.1 | 88.8 | 83.8 | 135.8 |
| 2000 | 82.3 | 83.3 | 84.6 | 84.6 | 85.4 | 87.8 | 90.2 | 92.4 | 98.5 | 99.5 | 96.4 | 88.1 | 82.9 | 135.2 |
| 2500 | 83.0 | 84.0 | 85.3 | 86.0 | 86.9 | 88.5 | 91.1 | 93.3 | 98.5 | 99.2 | 95.4 | 88.0 | 82.3 | 135.2 |
| 3150 | 83.5 | 84.6 | 85.9 | 86.6 | 87.4 | 90.0 | 91.7 | 94.1 | 99.3 | 97.3 | 94.4 | 87.6 | 81.8 | 135.2 |
| 4000 | 84.9 | 85.0 | 86.5 | 86.4 | 87.5 | 90.4 | 91.5 | 93.7 | 98.7 | 96.6 | 93.8 | 86.4 | 80.9 | 134.8 |
| 5000 | 85.0 | 85.6 | 86.4 | 87.6 | 88.4 | 90.3 | 92.7 | 95.1 | 98.3 | 97.3 | 92.9 | 86.3 | 80.8 | 135.3 |
| 6300 | 85.3 | 86.7 | 87.9 | 87.7 | 88.7 | 92.0 | 92.7 | 94.9 | 98.9 | 97.1 | 93.4 | 86.9 | 81.8 | 135.8 |
| 8000 | 84.4 | 86.1 | 87.0 | 87.6 | 89.4 | 91.5 | 92.8 | 94.7 | 98.4 | 97.5 | 94.0 | 87.9 | 82.5 | 136.2 |
| 10000 | 84.1 | 85.0 | 87.1 | 87.2 | 89.8 | 92.2 | 92.1 | 95.2 | 98.3 | 98.0 | 93.7 | 88.5 | 83.1 | 135.9 |
| 12500 | 82.7 | 85.5 | 85.7 | 86.8 | 88.8 | 91.2 | 91.4 | 94.0 | 96.2 | 96.5 | 92.7 | 88.2 | 83.2 | 136.3 |
| 16000 | 81.4 | 84.4 | 85.8 | 86.6 | 88.8 | 91.0 | 90.5 | 92.8 | 95.0 | 95.5 | 90.9 | 87.4 | 82.8 | 136.7 |
| 20000 | 76.7 | 81.8 | 83.0 | 84.6 | 88.7 | 89.7 | 88.2 | 90.5 | 92.3 | 92.4 | 87.5 | 85.0 | 81.0 | 136.1 |
| 25000 | 76.0 | 78.1 | 80.6 | 81.2 | 85.2 | 87.4 | 85.7 | 86.0 | 90.8 | 87.9 | 84.2 | 80.9 | 79.3 | 135.3 |
| 31500 | 74.2 | 74.8 | 78.8 | 79.7 | 80.5 | 81.5 | 81.7 | 83.4 | 86.4 | 86.7 | 82.0 | 79.5 | 73.8 | 135.3 |
| 40000 | 69.7 | 70.3 | 73.5 | 74.5 | 78.5 | 79.4 | 79.8 | 77.8 | 81.3 | 80.2 | 78.4 | 74.5 | 69.2 | 134.4 |
| 50000 | 62.8 | 63.9 | 66.3 | 68.3 | 70.7 | 72.2 | 70.9 | 70.6 | 75.6 | 72.6 | 69.7 | 68.9 | 63.1 | 132.2 |
| 63000 | 57.7 | 57.6 | 60.3 | 62.1 | 62.7 | 63.9 | 64.9 | 63.8 | 71.4 | 65.1 | 62.4 | 62.4 | 57.0 | 131.4 |
| 80000 | 51.2 | 51.4 | 54.2 | 56.9 | 55.6 | 58.3 | 57.0 | 57.5 | 63.6 | 57.9 | 56.6 | 53.8 | 48.5 | 131.1 |
| OASPL | 95.3 | 96.6 | 97.8 | 98.2 | 100.3 | 102.1 | 103.0 | 105.4 | 110.0 | 111.2 | 110.4 | 107.9 | 103.9 | 149.3 |

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TEST DATE 02-08-78 TAPE NO. N292 ALPHA SB59 TAMB 22.64
LOCATION C41 ANECH CH AERO. RDG. ADH063 FAMB 29.6570 RELHUM 47.80

MODEL TEST POINT 0109 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 132.4 SQ CH (20.52 SQ IN) - MODEL 116.13 M/SEC (381.0 FPS) FREE-JET SPEED

07/19/79 14.683

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X01090

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----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| 50 | 50.0 | 52.0 | 54.0 | 56.0 | 58.0 | 60.0 | 62.0 | 64.0 | 66.0 | 68.0 | 70.0 | 72.0 | 74.0 | 76.0 | 78.0 | 80.0 | 82.0 | 84.0 | 86.0 | 88.0 | 90.0 | 92.0 | 94.0 | 96.0 | 98.0 | 100.0 | 102.0 | 104.0 | 106.0 | 108.0 | 110.0 | 112.0 | 114.0 | 116.0 | 118.0 | 120.0 | 122.0 | 124.0 | 126.0 | 128.0 | 130.0 | 132.0 | 134.0 | 136.0 | 138.0 | 140.0 | 142.0 | 144.0 | 146.0 | 148.0 | 150.0 | 152.0 | 154.0 | 156.0 | 158.0 | 160.0 | 162.0 | 164.0 | 166.0 | 168.0 | 170.0 | 172.0 | 174.0 | 176.0 | 178.0 | 180.0 | 182.0 | 184.0 | 186.0 | 188.0 | 190.0 | 192.0 | 194.0 | 196.0 | 198.0 | 200.0 | 202.0 | 204.0 | 206.0 | 208.0 | 210.0 | 212.0 | 214.0 | 216.0 | 218.0 | 220.0 | 222.0 | 224.0 | 226.0 | 228.0 | 230.0 | 232.0 | 234.0 | 236.0 | 238.0 | 240.0 | 242.0 | 244.0 | 246.0 | 248.0 | 250.0 | 252.0 | 254.0 | 256.0 | 258.0 | 260.0 | 262.0 | 264.0 | 266.0 | 268.0 | 270.0 | 272.0 | 274.0 | 276.0 | 278.0 | 280.0 | 282.0 | 284.0 | 286.0 | 288.0 | 290.0 | 292.0 | 294.0 | 296.0 | 298.0 | 300.0 | 302.0 | 304.0 | 306.0 | 308.0 | 310.0 | 312.0 | 314.0 | 316.0 | 318.0 | 320.0 | 322.0 | 324.0 | 326.0 | 328.0 | 330.0 | 332.0 | 334.0 | 336.0 | 338.0 | 340.0 | 342.0 | 344.0 | 346.0 | 348.0 | 350.0 | 352.0 | 354.0 | 356.0 | 358.0 | 360.0 | 362.0 | 364.0 | 366.0 | 368.0 | 370.0 | 372.0 | 374.0 | 376.0 | 378.0 | 380.0 | 382.0 | 384.0 | 386.0 | 388.0 | 390.0 | 392.0 | 394.0 | 396.0 | 398.0 | 400.0 | 402.0 | 404.0 | 406.0 | 408.0 | 410.0 | 412.0 | 414.0 | 416.0 | 418.0 | 420.0 | 422.0 | 424.0 | 426.0 | 428.0 | 430.0 | 432.0 | 434.0 | 436.0 | 438.0 | 440.0 | 442.0 | 444.0 | 446.0 | 448.0 | 450.0 | 452.0 | 454.0 | 456.0 | 458.0 | 460.0 | 462.0 | 464.0 | 466.0 | 468.0 | 470.0 | 472.0 | 474.0 | 476.0 | 478.0 | 480.0 | 482.0 | 484.0 | 486.0 | 488.0 | 490.0 | 492.0 | 494.0 | 496.0 | 498.0 | 500.0 | 502.0 | 504.0 | 506.0 | 508.0 | 510.0 | 512.0 | 514.0 | 516.0 | 518.0 | 520.0 | 522.0 | 524.0 | 526.0 | 528.0 | 530.0 | 532.0 | 534.0 | 536.0 | 538.0 | 540.0 | 542.0 | 544.0 | 546.0 | 548.0 | 550.0 | 552.0 | 554.0 | 556.0 | 558.0 | 560.0 | 562.0 | 564.0 | 566.0 | 568.0 | 570.0 | 572.0 | 574.0 | 576.0 | 578.0 | 580.0 | 582.0 | 584.0 | 586.0 | 588.0 | 590.0 | 592.0 | 594.0 | 596.0 | 598.0 | 600.0 | 602.0 | 604.0 | 606.0 | 608.0 | 610.0 | 612.0 | 614.0 | 616.0 | 618.0 | 620.0 | 622.0 | 624.0 | 626.0 | 628.0 | 630.0 | 632.0 | 634.0 | 636.0 | 638.0 | 640.0 | 642.0 | 644.0 | 646.0 | 648.0 | 650.0 | 652.0 | 654.0 | 656.0 | 658.0 | 660.0 | 662.0 | 664.0 | 666.0 | 668.0 | 670.0 | 672.0 | 674.0 | 676.0 | 678.0 | 680.0 | 682.0 | 684.0 | 686.0 | 688.0 | 690.0 | 692.0 | 694.0 | 696.0 | 698.0 | 700.0 | 702.0 | 704.0 | 706.0 | 708.0 | 710.0 | 712.0 | 714.0 | 716.0 | 718.0 | 720.0 | 722.0 | 724.0 | 726.0 | 728.0 | 730.0 | 732.0 | 734.0 | 736.0 | 738.0 | 740.0 | 742.0 | 744.0 | 746.0 | 748.0 | 750.0 | 752.0 | 754.0 | 756.0 | 758.0 | 760.0 | 762.0 | 764.0 | 766.0 | 768.0 | 770.0 | 772.0 | 774.0 | 776.0 | 778.0 | 780.0 | 782.0 | 784.0 | 786.0 | 788.0 | 790.0 | 792.0 | 794.0 | 796.0 | 798.0 | 800.0 | 802.0 | 804.0 | 806.0 | 808.0 | 810.0 | 812.0 | 814.0 | 816.0 | 818.0 | 820.0 | 822.0 | 824.0 | 826.0 | 828.0 | 830.0 | 832.0 | 834.0 | 836.0 | 838.0 | 840.0 | 842.0 | 844.0 | 846.0 | 848.0 | 850.0 | 852.0 | 854.0 | 856.0 | 858.0 | 860.0 | 862.0 | 864.0 | 866.0 | 868.0 | 870.0 | 872.0 | 874.0 | 876.0 | 878.0 | 880.0 | 882.0 | 884.0 | 886.0 | 888.0 | 890.0 | 892.0 | 894.0 | 896.0 | 898.0 | 900.0 | 902.0 | 904.0 | 906.0 | 908.0 | 910.0 | 912.0 | 914.0 | 916.0 | 918.0 | 920.0 | 922.0 | 924.0 | 926.0 | 928.0 | 930.0 | 932.0 | 934.0 | 936.0 | 938.0 | 940.0 | 942.0 | 944.0 | 946.0 | 948.0 | 950.0 | 952.0 | 954.0 | 956.0 | 958.0 | 960.0 | 962.0 | 964.0 | 966.0 | 968.0 | 970.0 | 972.0 | 974.0 | 976.0 | 978.0 | 980.0 | 982.0 | 984.0 | 986.0 | 988.0 | 990.0 | 992.0 | 994.0 | 996.0 | 998.0 | 1000.0 | 1002.0 | 1004.0 | 1006.0 | 1008.0 | 1010.0 | 1012.0 | 1014.0 | 1016.0 | 1018.0 | 1020.0 | 1022.0 | 1024.0 | 1026.0 | 1028.0 | 1030.0 | 1032.0 | 1034.0 | 1036.0 | 1038.0 | 1040.0 | 1042.0 | 1044.0 | 1046.0 | 1048.0 | 1050.0 | 1052.0 | 1054.0 | 1056.0 | 1058.0 | 1060.0 | 1062.0 | 1064.0 | 1066.0 | 1068.0 | 1070.0 | 1072.0 | 1074.0 | 1076.0 | 1078.0 | 1080.0 | 1082.0 | 1084.0 | 1086.0 | 1088.0 | 1090.0 | 1092.0 | 1094.0 | 1096.0 | 1098.0 | 1100.0 | 1102.0 | 1104.0 | 1106.0 | 1108.0 | 1110.0 | 1112.0 | 1114.0 | 1116.0 | 1118.0 | 1120.0 | 1122.0 | 1124.0 | 1126.0 | 1128.0 | 1130.0 | 1132.0 | 1134.0 | 1136.0 | 1138.0 | 1140.0 | 1142.0 | 1144.0 | 1146.0 | 1148.0 | 1150.0 | 1152.0 | 1154.0 | 1156.0 | 1158.0 | 1160.0 | 1162.0 | 1164.0 | 1166.0 | 1168.0 | 1170.0 | 1172.0 | 1174.0 | 1176.0 | 1178.0 | 1180.0 | 1182.0 | 1184.0 | 1186.0 | 1188.0 | 1190.0 | 1192.0 | 1194.0 | 1196.0 | 1198.0 | 1200.0 | 1202.0 | 1204.0 | 1206.0 | 1208.0 | 1210.0 | 1212.0 | 1214.0 | 1216.0 | 1218.0 | 1220.0 | 1222.0 | 1224.0 | 1226.0 | 1228.0 | 1230.0 | 1232.0 | 1234.0 | 1236.0 | 1238.0 | 1240.0 | 1242.0 | 1244.0 | 1246.0 | 1248.0 | 1250.0 | 1252.0 | 1254.0 | 1256.0 | 1258.0 | 1260.0 | 1262.0 | 1264.0 | 1266.0 | 1268.0 | 1270.0 | 1272.0 | 1274.0 | 1276.0 | 1278.0 | 1280.0 | 1282.0 | 1284.0 | 1286.0 | 1288.0 | 1290.0 | 1292.0 | 1294.0 | 1296.0 | 1298.0 | 1300.0 | 1302.0 | 1304.0 | 1306.0 | 1308.0 | 1310.0 | 1312.0 | 1314.0 | 1316.0 | 1318.0 | 1320.0 | 1322.0 | 1324.0 | 1326.0 | 1328.0 | 1330.0 | 1332.0 | 1334.0 | 1336.0 | 1338.0 | 1340.0 | 1342.0 | 1344.0 | 1346.0 | 1348.0 | 1350.0 | 1352.0 | 1354.0 | 1356.0 | 1358.0 | 1360.0 | 1362.0 | 1364.0 | 1366.0 | 1368.0 | 1370.0 | 1372.0 | 1374.0 | 1376.0 | 1378.0 | 1380.0 | 1382.0 | 1384.0 | 1386.0 | 1388.0 | 1390.0 | 1392.0 | 1394.0 | 1396.0 | 1398.0 | 1400.0 | 1402.0 | 1404.0 | 1406.0 | 1408.0 | 1410.0 | 1412.0 | 1414.0 | 1416.0 | 1418.0 | 1420.0 | 1422.0 | 1424.0 | 1426.0 | 1428.0 | 1430.0 | 1432.0 | 1434.0 | 1436.0 | 1438.0 | 1440.0 | 1442.0 | 1444.0 | 1446.0 | 1448.0 | 1450.0 | 1452.0 | 1454.0 | 1456.0 | 1458.0 | 1460.0 | 1462.0 | 1464.0 | 1466.0 | 1468.0 | 1470.0 | 1472.0 | 1474.0 | 1476.0 | 1478.0 | 1480.0 | 1482.0 | 1484.0 | 1486.0 | 1488.0 | 1490.0 | 1492.0 | 1494.0 | 1496.0 | 1498.0 | 1500.0 | 1502.0 | 1504.0 | 1506.0 | 1508.0 | 1510.0 | 1512.0 | 1514.0 | 1516.0 | 1518.0 | 1520.0 | 1522.0 | 1524.0 | 1526.0 | 1528.0 | 1530.0 | 1532.0 | 1534.0 | 1536.0 | 1538.0 | 1540.0 | 1542.0 | 1544.0 | 1546.0 | 1548.0 | 1550.0 | 1552.0 | 1554.0 | 1556.0 | 1558.0 | 1560.0 | 1562.0 | 1564.0 | 1566.0 | 1568.0 | 1570.0 | 1572.0 | 1574.0 | 1576.0 | 1578.0 | 1580.0 | 1582.0 | 1584.0 | 1586.0 | 1588.0 | 1590.0 | 1592.0 | 1594.0 | 1596.0 | 1598.0 | 1600.0 | 1602.0 | 1604.0 | 1606.0 | 1608.0 | 1610.0 | 1612.0 | 1614.0 | 1616.0 | 1618.0 | 1620.0 | 1622.0 | 1624.0 | 1626.0 | 1628.0 | 1630.0 | 1632.0 | 1634.0 | 1636.0 | 1638.0 | 1640.0 | 1642.0 | 1644.0 | 1646.0 | 1648.0 | 1650.0 | 1652.0 | 1654.0 | 1656.0 | 1658.0 | 1660.0 | 1662.0 | 1664.0 | 1666.0 | 1668.0 | 1670.0 | 1672.0 | 1674.0 | 1676.0 | 1678.0 | 1680.0 | 1682.0 | 1684.0 | 1686.0 | 1688.0 | 1690.0 | 1692.0 | 1694.0 | 1696.0 | 1698.0 | 1700.0 | 1702.0 | 1704.0 | 1706.0 | 1708.0 | 1710.0 | 1712.0 | 1714.0 | 1716.0 | 1718.0 | 1720.0 | 1722.0 | 1724.0 | 1726.0 | 1728.0 | 1730.0 | 1732.0 | 1734.0 | 1736.0 | 1738.0 | 1740.0 | 1742.0 | 1744.0 | 1746.0 | 1748.0 | 1750.0 | 1752.0 | 1754.0 | 1756.0 | 1758.0 | 1760.0 | 1762.0 | 1764.0 | 1766.0 | 1768.0 | 1770.0 | 1772.0 | 1774.0 | 1776.0 | 1778.0 | 1780.0 | 1782.0 | 1784.0 | 1786.0 | 1788.0 | 1790.0 | 1792.0 | 1794.0 | 1796.0 | 1798.0 | 1800.0 | 1802.0 | 1804.0 | 1806.0 | 1808.0 | 1810.0 | 1812.0 | 1814.0 | 1816.0 | 1818.0 | 1820.0 | 1822.0 | 1824.0 | 1826.0 | 1828.0 | 1830.0 | 1832.0 | 1834.0 | 1836.0 | 1838.0 | 1840.0 | 1842.0 | 1844.0 | 1846.0 | 1848.0 | 1850.0 | 1852.0 | 1854.0 | 1856.0 | 1858.0 | 1860.0 | 1862.0 | 1864.0 | 1866.0 | 1868.0 | 1870.0 | 1872.0 | 1874.0 | 1876.0 | 1878.0 | 1880.0 | 1882.0 | 1884.0 | 1886.0 | 1888.0 | 1890.0 | 1892.0 | 1894.0 | 1896.0 | 1898.0 | 1900.0 | 1902.0 | 1904.0 | 1906.0 | 1908.0 | 1910.0 | 1912.0 | 1914.0 | 1916.0 | 1918.0 | 1920.0 | 1922.0 | 1924.0 | 1926.0 | 1928.0 | 1930.0 | 1932.0 | 1934.0 | 1936.0 | 1938.0 | 1940.0 | 1942.0 | 1944.0 | 1946.0 | 1948.0 | 1950.0 | 1952.0 | 1954.0 | 1956.0 | 1958.0 | 1960.0 | 1962.0 | 1964.0 | 1966.0 | 1968.0 | 1970.0 | 1972.0 | 1974.0 | 1976.0 | 1978.0 | 1980.0 | 1982.0 | 1984.0 | 1986.0 | 1988.0 | 1990.0 | 1992.0 | 1994.0 | 1996.0 | 1998.0 | 2000.0 | 2002.0 | 2004.0 | 2006.0 | 2008.0 | 2010.0 | 2012.0 | 2014.0 | 2016.0 | 2018.0 | 2020.0 | 2022.0 | 2024.0 | 2026.0 | 2028.0 | 2030.0 | 2032.0 | 2034.0 | 2036.0 | 2038.0 | 2040.0 | 2042.0 | 2044.0 | 2046.0 | 2048.0 | 2050.0 | 2052.0 | 2054.0 | 2056.0 | 2058.0 | 2060.0 | 2062.0 | 2064.0 | 2066.0 | 2068.0 | 2070.0 | 2072.0 | 2074.0 | 2076.0 | 2078.0 | 2080.0 | 2082.0 | 2084.0 | 2086.0 | 2088.0 | 2090.0 | 2092.0 | 2094.0 | 2096.0 | 2098.0 | 2100.0 | 2102.0 | 2104.0 | 2106.0 | 2108.0 | 2110.0 | 2112.0 | 2114.0 | 2116.0 | 2118.0 | 2120.0 | 2122.0 | 2124.0 | 2126.0 | 2128.0 | 2130.0 | 2132.0 | 2134.0 |
|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----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07/19/79 14.663

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X01095

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PHL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 60.6 | 63.1 | 63.3 | 63.0 | 63.2 | 64.4 | 64.3 | 65.0 | 72.1 | 76.7 | 77.4 | 74.9 | 67.1 | 161.7 |
| 63 | 61.5 | 63.5 | 64.0 | 63.0 | 66.5 | 65.3 | 65.3 | 65.5 | 74.0 | 77.0 | 76.9 | 72.0 | 65.0 | 151.3 |
| 80 | 63.1 | 65.0 | 64.6 | 64.8 | 75.7 | 66.9 | 66.5 | 67.8 | 75.8 | 78.6 | 77.0 | 70.3 | 66.4 | 152.7 |
| 100 | 66.7 | 67.9 | 68.6 | 66.9 | 67.8 | 68.3 | 68.4 | 69.4 | 77.5 | 78.6 | 76.0 | 68.0 | 64.8 | 152.5 |
| 125 | 65.9 | 66.4 | 67.5 | 68.1 | 68.1 | 69.3 | 69.3 | 70.3 | 77.6 | 78.3 | 75.7 | 67.1 | 64.7 | 152.4 |
| 160 | 66.5 | 66.5 | 68.6 | 67.5 | 69.4 | 70.7 | 70.5 | 71.7 | 78.4 | 78.0 | 75.2 | 66.2 | 64.5 | 152.8 |
| 200 | 66.2 | 69.3 | 70.4 | 69.3 | 70.6 | 72.0 | 71.3 | 72.4 | 78.6 | 78.0 | 73.6 | 65.8 | 63.4 | 153.2 |
| 250 | 68.7 | 68.7 | 70.2 | 69.9 | 69.9 | 71.1 | 71.9 | 72.3 | 78.7 | 77.9 | 72.7 | 65.7 | 62.7 | 153.4 |
| 315 | 67.0 | 68.8 | 70.1 | 69.6 | 71.3 | 71.8 | 73.0 | 73.4 | 78.8 | 76.2 | 71.9 | 65.4 | 62.1 | 153.8 |
| 400 | 67.2 | 69.1 | 70.5 | 70.9 | 71.8 | 73.4 | 73.8 | 74.5 | 79.5 | 75.8 | 71.5 | 64.2 | 60.7 | 154.3 |
| 500 | 67.2 | 69.3 | 70.9 | 71.3 | 72.1 | 74.0 | 74.0 | 74.4 | 79.3 | 75.4 | 70.3 | 63.5 | 59.7 | 154.8 |
| 630 | 68.0 | 69.4 | 71.3 | 71.2 | 73.2 | 74.2 | 75.4 | 76.0 | 79.6 | 75.9 | 70.4 | 63.6 | 59.8 | 155.7 |
| 800 | 67.5 | 69.7 | 71.1 | 72.3 | 73.2 | 75.8 | 75.2 | 75.5 | 78.8 | 76.0 | 70.6 | 64.0 | 59.4 | 156.2 |
| 1000 | 67.2 | 70.3 | 72.3 | 72.1 | 73.8 | 75.2 | 75.1 | 75.0 | 78.7 | 76.4 | 70.0 | 64.0 | 59.0 | 156.8 |
| 1250 | 66.7 | 69.2 | 70.9 | 71.7 | 74.6 | 75.7 | 75.4 | 75.4 | 77.4 | 75.0 | 64.9 | 60.4 | 57.2 | 157.2 |
| 1600 | 66.8 | 70.3 | 72.0 | 71.8 | 73.4 | 74.5 | 73.7 | 74.5 | 76.6 | 75.0 | 68.2 | 63.7 | 58.5 | 158.0 |
| 2000 | 63.9 | 68.8 | 69.7 | 70.6 | 73.1 | 74.1 | 72.7 | 73.3 | 74.6 | 72.4 | 65.1 | 60.8 | 54.5 | 158.1 |
| 2500 | 60.5 | 66.1 | 68.4 | 69.3 | 72.5 | 72.3 | 69.9 | 70.6 | 73.3 | 67.9 | 60.9 | 54.4 | 48.0 | 158.4 |
| 3150 | 51.8 | 60.4 | 63.2 | 65.2 | 68.2 | 68.7 | 66.2 | 64.9 | 66.5 | 63.5 | 54.8 | 48.0 | 34.8 | 157.5 |
| 4000 | 44.0 | 51.2 | 56.2 | 57.7 | 59.4 | 59.9 | 58.9 | 58.3 | 59.2 | 54.1 | 44.9 | 35.8 | 17.1 | 156.4 |
| 5000 | 29.1 | 37.4 | 45.7 | 48.9 | 52.9 | 53.0 | 48.2 | 47.7 | 47.9 | 39.7 | 29.0 | 17.1 | 156.0 | |
| 6300 | 9.0 | 20.3 | 29.6 | 33.5 | 35.1 | 35.9 | 33.3 | 29.9 | 32.3 | 18.5 | 4.5 | | 153.1 | |
| 8000 | | | 0.1 | 7.2 | 8.5 | 9.8 | 9.1 | 3.6 | 4.4 | | | | 153.3 | |
| 10000 | | | | | | | | | | | | | | 151.5 |

ORIGINAL PAGE IS
OF POOR QUALITY

| | | | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| OSPL | 78.7 | 80.9 | 82.4 | 82.5 | 84.7 | 85.4 | 85.0 | 85.6 | 90.3 | 89.2 | 86.0 | 80.1 | 75.3 | 169.1 |
| PNL | 86.0 | 89.5 | 91.3 | 91.9 | 94.4 | 94.9 | 93.8 | 94.3 | 97.7 | 95.6 | 89.9 | 83.7 | 78.7 | |
| PNLT | 86.0 | 89.5 | 92.1 | 92.5 | 95.7 | 96.0 | 94.3 | 94.3 | 98.4 | 95.6 | 89.9 | 83.7 | 76.7 | |

DIAMETER RATIO 8.260 FREQUENCY SHIFT -9

| | | | | | | | |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| TEST DATE | 02-08-78 | TAPE NO. | N292 | ALPHA | SB59 | TAMB | 22.64 |
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH063 | PAMB | 29.6870 | RELHUM | 47.80 |

| | | | | |
|-------|------------|-------------------------|-------------------------------------|---------------------------|
| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
| 0100 | 0109 | 731.5 M (2400.0 FT) SL | 9032.2 SQ CM (1400.00 SQ IN) - FULL | 116.13 M/SEC (381.0 FPS) |

07/19/79 16.690

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X01100
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250 89.8 93.6 93.1 93.4 93.7 96.3 98.7 100.4 105.6 111.2 116.0 118.5 119.1 152.2
315 90.6 92.9 93.2 93.2 95.1 97.7 97.8 100.7 107.7 113.5 117.6 120.3 118.7 153.5
400 92.4 94.4 94.7 94.5 95.6 98.0 99.1 101.5 109.0 117.3 121.4 121.6 118.8 155.7
500 93.7 95.0 96.5 95.8 96.4 99.3 100.4 102.8 110.5 118.9 122.5 124.2 119.1 157.4
630 94.9 96.9 97.7 97.2 98.5 100.9 102.0 105.2 113.7 120.2 123.4 122.8 119.9 157.7
800 96.6 98.2 98.4 99.5 99.8 101.9 103.3 106.5 115.2 121.3 124.4 123.3 119.7 158.6
1000 106.2 107.3 104.8 103.8 102.9 104.3 104.9 108.1 116.3 122.1 125.0 123.2 118.8 159.2
1250 107.4 107.9 106.2 105.0 104.8 105.7 106.0 109.2 116.8 121.3 125.1 121.8 116.7 158.8
1600 113.7 110.6 109.8 107.1 104.7 105.6 106.9 110.4 118.2 121.9 124.4 120.1 116.3 158.8
2000 110.9 111.4 111.7 110.7 108.8 106.4 106.5 110.4 119.1 123.3 122.5 118.4 113.2 158.7
2500 109.0 109.8 110.6 110.9 110.9 111.0 108.9 111.4 119.0 123.5 120.6 116.6 111.6 158.3
3150 107.5 109.1 108.6 109.1 109.9 112.0 110.9 112.4 119.8 122.2 120.1 115.6 110.6 157.9
4000 106.8 107.9 107.9 108.5 110.1 112.0 112.6 119.5 121.0 118.2 113.9 108.6 107.0
5000 106.4 106.9 107.5 107.5 108.8 110.1 111.3 114.0 118.4 120.4 117.5 112.2 107.4 156.5
6300 105.1 106.4 107.7 107.9 110.3 110.0 113.7 117.8 119.0 116.9 110.9 107.1 155.9
8000 104.4 106.0 106.6 107.3 107.8 109.5 109.8 112.6 116.3 117.6 114.5 109.7 105.7 155.1
10000 102.5 104.6 106.0 106.1 108.0 109.6 108.3 111.8 114.9 117.1 112.8 108.9 105.1 154.7
12500 99.6 102.6 103.3 104.7 106.7 108.4 107.1 109.7 112.5 114.5 110.8 106.4 103.1 153.4
16000 98.0 101.0 102.1 103.7 105.9 107.4 105.6 107.7 109.6 113.0 108.2 104.0 102.0 152.9
20000 92.5 98.5 99.3 100.7 104.3 105.1 102.0 104.8 107.1 109.1 105.1 101.4 98.7 151.7
25000 91.1 93.8 96.4 97.0 101.4 101.5 99.6 99.5 104.6 104.4 100.3 97.5 97.4 150.4
31500 88.8 90.1 93.8 95.5 96.1 96.3 95.3 97.0 100.4 102.6 96.8 92.6 91.2 150.1
40000 84.1 85.3 88.5 90.0 94.3 94.5 89.8 91.8 95.8 97.1 92.2 87.1 87.0 149.7
50000 76.6 78.8 80.8 83.1 85.8 86.6 85.0 84.9 91.6 91.8 86.2 82.5 81.7 148.0
63000 71.0 72.6 75.2 76.7 77.5 78.7 79.0 79.1 88.1 87.3 79.4 76.9 75.8 148.3
80000 64.9 67.1 69.9 72.6 71.9 74.0 72.6 74.5 82.5 82.2 74.5 70.3 69.3 149.8

GASPL 119.0 119.3 119.3 119.0 119.4 120.6 120.4 123.0 129.2 132.9 133.9 132.3 128.7 170.0

TEST DATE 02-07-78
LOCATION C41 ANECH CH

TAPE NO. N291
AERG. RDG. ADH042

ALPHA SB59 TAMB 16.88
PAMB 29.6869 RELHUM 43.40

MODEL TEST POINT
0100 0110

ACOUSTIC RANGE
12.2 M (40.0 FT) ARC

SIZE
20.52 SQ IN)

MODEL

FREE-JET SPEED
M/SEC (0. FPS)

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07/19/79 18.690

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X01100

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PHL

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

119.0

119.2

119.3

119.4

120.6

120.4

123.0

129.2

132.9

133.9

132.3

128.7

170.0

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OF POOR QUALITY

MODEL/FULL SIZE SCALE FACTOR
INPUT 1.000 CALC. 1.000

FREE JET VELOCITY (FT/SEC)
FREE JET DIAMETER (IN)

REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

TEST DATE 02-07-78 TAPE NO. N291 ALPHA SB59 TAMB 16.88
LOCATION C41 ANECH CH AERG. RDG. ADH042 PAMB 29.6269 RELHUM 43.40

MODEL TEST POINT 0100 12.2 M (40.0 FT) ARC 132.4 SQ CM (20.52 SQ IN) - MODEL SIZE 0. M/SEC (0. FPS) FREE-JET SPEED

07/19/79 18.690

110

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X01105

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-------|------|-------|
| 50 | 71.3 | 74.9 | 76.2 | 76.7 | 78.2 | 80.7 | 81.7 | 83.7 | 90.5 | 97.7 | 100.3 | 98.3 | 92.1 | 174.1 |
| 63 | 72.6 | 75.4 | 78.0 | 78.0 | 79.0 | 82.0 | 83.0 | 85.0 | 92.0 | 99.3 | 101.4 | 100.8 | 92.4 | 175.7 |
| 80 | 73.7 | 77.3 | 79.1 | 79.4 | 81.1 | 83.6 | 84.6 | 87.4 | 95.1 | 100.6 | 102.2 | 99.4 | 93.1 | 176.1 |
| 100 | 78.4 | 78.5 | 79.8 | 81.6 | 82.4 | 84.6 | 85.9 | 88.6 | 96.6 | 101.6 | 103.1 | 99.8 | 92.8 | 176.9 |
| 125 | 84.9 | 87.5 | 86.1 | 85.9 | 85.4 | 86.9 | 87.4 | 90.1 | 97.6 | 102.3 | 103.6 | 99.5 | 91.7 | 177.5 |
| 160 | 85.8 | 88.0 | 87.3 | 86.9 | 87.1 | 88.1 | 88.4 | 91.1 | 98.0 | 101.3 | 103.6 | 97.9 | 89.1 | 177.1 |
| 200 | 91.9 | 90.4 | 90.8 | 88.9 | 86.9 | 87.9 | 89.1 | 92.1 | 99.2 | 101.8 | 102.6 | 95.9 | 87.3 | 177.1 |
| 250 | 88.7 | 91.0 | 92.4 | 92.2 | 90.8 | 88.5 | 88.5 | 92.0 | 99.8 | 102.9 | 100.3 | 93.8 | 84.5 | 177.0 |
| 315 | 86.5 | 89.0 | 91.0 | 92.1 | 92.6 | 92.9 | 90.6 | 92.6 | 99.4 | 102.7 | 98.1 | 91.4 | 82.1 | 176.6 |
| 400 | 84.5 | 87.9 | 88.7 | 90.0 | 91.3 | 93.6 | 92.3 | 93.3 | 99.9 | 101.0 | 97.1 | 89.7 | 80.1 | 176.2 |
| 500 | 83.3 | 86.1 | 87.7 | 88.5 | 89.6 | 91.4 | 93.1 | 93.3 | 99.3 | 99.3 | 94.6 | 87.3 | 77.1 | 175.4 |
| 630 | 82.3 | 85.0 | 86.9 | 87.8 | 89.6 | 91.2 | 92.1 | 94.3 | 97.8 | 98.4 | 93.5 | 85.0 | 74.9 | 174.9 |
| 800 | 80.6 | 84.1 | 86.8 | 88.0 | 88.6 | 91.1 | 90.6 | 93.8 | 97.0 | 96.7 | 91.3 | 83.0 | 73.5 | 174.2 |
| 1000 | 79.5 | 83.4 | 85.5 | 87.2 | 88.3 | 90.1 | 90.3 | 92.5 | 95.2 | 95.0 | 89.5 | 81.1 | 70.9 | 173.4 |
| 1250 | 77.1 | 81.6 | 84.7 | 85.9 | 88.3 | 90.2 | 88.6 | 91.6 | 93.6 | 94.1 | 87.4 | 79.5 | 68.8 | 173.1 |
| 1600 | 73.2 | 79.1 | 81.5 | 84.1 | 86.8 | 88.6 | 87.1 | 89.1 | 90.8 | 91.0 | 84.4 | 75.6 | 64.5 | 171.7 |
| 2000 | 70.7 | 76.8 | 79.9 | 82.8 | 85.8 | 87.5 | 85.5 | 86.8 | 87.4 | 88.6 | 80.9 | 71.6 | 60.4 | 171.3 |
| 2500 | 63.4 | 73.2 | 76.3 | 79.2 | 83.6 | 84.7 | 81.3 | 83.3 | 84.1 | 83.7 | 76.0 | 66.2 | 53.1 | 170.1 |
| 3150 | 58.6 | 66.0 | 71.5 | 73.9 | 79.3 | 79.8 | 77.5 | 76.5 | 79.7 | 76.6 | 67.8 | 57.4 | 42.5 | 168.8 |
| 4000 | 50.1 | 57.5 | 65.1 | 69.2 | 71.0 | 71.7 | 70.8 | 70.7 | 71.7 | 70.1 | 58.1 | 43.5 | 21.7 | 168.4 |
| 5000 | 35.6 | 45.2 | 53.6 | 58.3 | 64.3 | 65.0 | 59.8 | 60.1 | 60.8 | 57.0 | 43.7 | 24.3 | | 168.0 |
| 6300 | 10.4 | 24.5 | 33.8 | 40.5 | 45.7 | 47.2 | 44.9 | 42.4 | 44.6 | 37.5 | 19.9 | | | 166.4 |
| 8000 | | | 6.9 | 14.9 | 19.3 | 21.6 | 20.7 | 17.3 | 19.8 | 8.1 | | | | 166.6 |
| 10000 | | | | | | | | | | | | | | 168.1 |

ORIGINAL PAGE IS
OF POOR QUALITY

OASPL 96.5 98.2 99.4 99.9 100.5 101.6 103.7 109.4 112.2 111.9 107.9 100.3 186.2
PNL 101.0 103.3 105.2 106.3 108.2 109.7 108.5 110.3 115.0 116.8 114.1 107.9 99.3
PNLT 102.2 104.0 105.2 106.3 109.5 110.9 109.0 110.3 115.0 117.3 115.1 107.9 100.5

DIAMETER RATIO 8.260 FREQUENCY SHIFT -9

TEST DATE 02-07-78 TAPE NO. N291 ALPHA SB59 TAMB 16.88
LOCATION C41 ANECH CH AERO. RDG. ADH042 PAMB 29.6869 RELHUM 43.40

MODEL TEST POINT ACQUSTIC RANGE SIZE FREE-JET SPEED
0100 0110 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)

07/12/79 14.663

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X01110
 BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ
50
63
80
100
125
160
200

**ORIGINAL PAGE IS
OF POOR QUALITY**

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 86.0 | 89.6 | 89.3 | 90.1 | 91.0 | 93.3 | 95.7 | 97.9 | 102.6 | 107.9 | 113.0 | 116.5 | 116.6 | 149.6 |
| 315 | 87.9 | 89.6 | 89.7 | 90.5 | 92.1 | 93.9 | 94.8 | 97.5 | 104.4 | 110.0 | 114.9 | 118.1 | 116.7 | 151.0 |
| 400 | 89.9 | 90.9 | 92.2 | 91.0 | 92.8 | 95.0 | 96.6 | 98.5 | 106.0 | 114.0 | 118.4 | 120.1 | 116.3 | 153.3 |
| 500 | 90.7 | 91.8 | 93.3 | 93.1 | 93.7 | 96.0 | 97.4 | 99.8 | 108.0 | 116.9 | 120.0 | 119.9 | 114.6 | 154.2 |
| 630 | 91.3 | 93.1 | 94.4 | 93.9 | 97.0 | 97.4 | 98.8 | 102.2 | 110.6 | 117.2 | 121.8 | 119.6 | 112.9 | 155.0 |
| 800 | 95.6 | 95.7 | 96.4 | 96.2 | 96.8 | 99.4 | 100.3 | 104.0 | 112.7 | 119.3 | 123.4 | 120.3 | 111.5 | 156.5 |
| 1000 | 98.7 | 99.5 | 100.3 | 98.3 | 98.9 | 100.5 | 102.2 | 105.6 | 114.8 | 119.6 | 123.7 | 119.9 | 109.3 | 156.7 |
| 1250 | 105.3 | 105.1 | 103.2 | 101.2 | 101.5 | 103.6 | 103.5 | 106.9 | 115.1 | 118.5 | 125.1 | 118.8 | 107.7 | 157.4 |
| 1600 | 109.4 | 109.3 | 108.8 | 106.6 | 103.4 | 104.3 | 105.4 | 108.6 | 116.7 | 120.2 | 125.9 | 118.3 | 108.6 | 158.5 |
| 2000 | 106.9 | 108.9 | 110.2 | 109.9 | 108.0 | 104.6 | 105.0 | 109.2 | 119.6 | 123.5 | 125.5 | 117.2 | 108.4 | 159.5 |
| 2500 | 104.0 | 105.8 | 107.1 | 108.1 | 109.7 | 110.6 | 107.9 | 110.6 | 119.7 | 124.0 | 123.4 | 116.1 | 107.3 | 158.9 |
| 3150 | 103.8 | 105.1 | 104.6 | 104.9 | 106.5 | 110.1 | 110.5 | 111.6 | 119.3 | 122.0 | 121.9 | 114.1 | 105.8 | 157.7 |
| 4000 | 102.4 | 103.2 | 104.2 | 104.0 | 104.5 | 106.9 | 109.8 | 111.5 | 117.6 | 119.9 | 120.0 | 111.7 | 103.9 | 155.9 |
| 5000 | 102.2 | 102.6 | 103.1 | 103.8 | 104.4 | 106.5 | 108.1 | 111.8 | 117.2 | 119.7 | 118.6 | 109.3 | 102.5 | 155.5 |
| 6300 | 101.0 | 102.1 | 103.6 | 103.1 | 103.8 | 106.9 | 108.1 | 112.1 | 117.0 | 118.7 | 117.3 | 108.3 | 101.5 | 155.0 |
| 8000 | 100.3 | 102.7 | 102.3 | 102.9 | 103.8 | 105.9 | 107.7 | 110.5 | 115.5 | 117.1 | 116.1 | 106.6 | 100.4 | 154.1 |
| 10000 | 98.7 | 101.0 | 102.5 | 102.6 | 103.9 | 105.8 | 106.2 | 110.0 | 114.4 | 116.6 | 114.8 | 105.4 | 98.7 | 153.8 |
| 12500 | 96.8 | 99.1 | 100.3 | 101.1 | 102.9 | 104.1 | 104.8 | 108.1 | 112.0 | 114.5 | 111.7 | 103.6 | 97.3 | 152.4 |
| 16000 | 94.8 | 98.0 | 99.6 | 100.2 | 102.3 | 104.1 | 103.3 | 106.7 | 109.6 | 112.5 | 109.4 | 102.2 | 85.9 | 151.9 |
| 20000 | 90.5 | 95.6 | 96.3 | 97.7 | 101.5 | 102.3 | 100.5 | 103.6 | 106.9 | 109.1 | 105.6 | 99.6 | 93.6 | 150.7 |
| 25000 | 89.3 | 91.9 | 93.9 | 94.2 | 98.3 | 99.5 | 97.5 | 98.5 | 104.4 | 104.2 | 101.5 | 95.3 | 92.4 | 149.4 |
| 31500 | 87.1 | 88.1 | 91.1 | 92.5 | 93.5 | 94.1 | 93.2 | 96.0 | 99.6 | 103.4 | 97.3 | 90.0 | 86.6 | 149.4 |
| 40000 | 81.8 | 83.0 | 85.8 | 86.5 | 91.3 | 92.0 | 88.3 | 90.8 | 95.0 | 97.9 | 92.7 | 84.8 | 82.2 | 148.6 |
| 50000 | 74.6 | 75.9 | 77.8 | 80.3 | 82.5 | 83.5 | 83.0 | 83.7 | 90.9 | 91.9 | 86.4 | 79.7 | 76.1 | 146.9 |
| 63000 | 69.2 | 69.6 | 72.0 | 73.4 | 73.8 | 75.4 | 76.7 | 77.8 | 87.6 | 85.1 | 80.4 | 73.9 | 70.6 | 146.9 |
| 80000 | 62.9 | 62.9 | 65.4 | 68.9 | 67.3 | 69.5 | 69.0 | 71.5 | 81.3 | 81.5 | 75.6 | 65.8 | 62.5 | 148.3 |
| QASPL | 114.9 | 115.9 | 116.4 | 116.2 | 116.5 | 118.0 | 118.5 | 121.4 | 128.3 | 131.9 | 134.1 | 129.5 | 123.9 | 168.9 |

TEST DATE 02-08-78 TAPE NO. N292 ALPHA SB59 TAMB 17.78
 LOCATION C41 ANECH CH AERC. RDG. ADH056 PAMB 29.7230 RELHUM 52.80

MODEL TEST POINT 0100 0111 ACQUSTIC RANGE 12.2 M (40.0 FT) ARC 132.4 SQ CM (20.52 SQ IN) - MODEL 88.09 M/SEC (289.0 FPS) FREE-JET SPEED

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X01110

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 91.5 | 94.0 | 92.7 | 92.4 | 92.1 | 93.3 | 94.3 | 95.2 | 101.8 | 106.7 | 111.1 | 114.6 | 114.6 | 147.9 |
| 315 | 91.5 | 94.0 | 92.7 | 92.9 | 93.3 | 94.0 | 93.8 | 95.4 | 104.2 | 111.7 | 115.7 | 116.0 | 115.9 | 151.2 |
| 400 | 93.3 | 94.2 | 93.2 | 93.2 | 94.0 | 95.1 | 95.9 | 97.0 | 106.7 | 115.2 | 118.4 | 119.4 | 116.5 | 153.2 |
| 500 | 94.7 | 95.0 | 95.4 | 95.4 | 94.9 | 96.2 | 96.8 | 98.5 | 109.3 | 115.6 | 120.1 | 119.8 | 116.3 | 154.2 |
| 630 | 95.7 | 96.0 | 96.6 | 96.4 | 98.4 | 97.6 | 98.1 | 100.6 | 111.4 | 117.7 | 122.2 | 121.1 | 116.6 | 155.9 |
| 800 | 96.7 | 97.7 | 97.9 | 98.4 | 98.0 | 99.7 | 99.6 | 102.3 | 113.6 | 118.3 | 122.8 | 120.4 | 116.3 | 156.3 |
| 1000 | 99.8 | 99.4 | 99.4 | 100.1 | 100.0 | 100.9 | 101.4 | 103.9 | 113.9 | 117.1 | 124.1 | 120.2 | 114.5 | 156.7 |
| 1250 | 103.8 | 102.8 | 102.8 | 103.2 | 102.7 | 104.1 | 102.9 | 105.3 | 115.6 | 118.8 | 124.8 | 119.7 | 115.3 | 157.6 |
| 1600 | 110.2 | 109.1 | 106.1 | 108.8 | 104.7 | 104.8 | 104.9 | 107.0 | 118.5 | 122.1 | 124.3 | 118.2 | 114.5 | 158.5 |
| 2000 | 114.4 | 112.0 | 111.9 | 109.3 | 105.3 | 105.3 | 104.6 | 107.7 | 118.9 | 122.6 | 123.5 | 116.4 | 113.6 | 158.5 |
| 2500 | 110.7 | 112.8 | 111.0 | 111.5 | 111.4 | 107.7 | 103.3 | 118.8 | 121.2 | 121.3 | 115.7 | 112.5 | 107.7 | 157.7 |
| 3150 | 109.4 | 110.4 | 110.8 | 107.9 | 108.5 | 111.1 | 110.4 | 110.6 | 117.5 | 119.4 | 119.8 | 113.7 | 111.0 | 156.4 |
| 4000 | 109.1 | 109.7 | 108.4 | 107.1 | 106.8 | 108.2 | 110.1 | 110.7 | 117.5 | 119.7 | 118.9 | 111.8 | 110.1 | 155.0 |
| 5000 | 107.5 | 107.7 | 108.0 | 107.2 | 106.8 | 108.2 | 108.8 | 111.5 | 117.9 | 119.3 | 118.2 | 111.5 | 109.8 | 155.9 |
| 6300 | 107.4 | 107.2 | 107.0 | 106.7 | 106.7 | 109.1 | 109.2 | 112.2 | 117.0 | 118.3 | 117.5 | 110.1 | 108.9 | 155.5 |
| 8000 | 106.0 | 106.6 | 107.5 | 106.9 | 107.1 | 108.6 | 109.4 | 111.3 | 116.1 | 118.0 | 116.3 | 109.0 | 107.4 | 155.2 |
| 10000 | 105.2 | 107.2 | 106.3 | 106.7 | 107.5 | 108.3 | 108.1 | 110.8 | 114.1 | 116.2 | 113.6 | 107.5 | 106.2 | 154.3 |
| 12500 | 103.3 | 105.3 | 106.3 | 105.3 | 106.5 | 107.1 | 106.7 | 109.0 | 112.2 | 114.7 | 111.8 | 106.7 | 105.4 | 153.6 |
| 16000 | 100.8 | 102.9 | 103.6 | 105.1 | 106.3 | 107.1 | 105.3 | 107.5 | 109.9 | 111.8 | 108.4 | 104.6 | 103.6 | 152.9 |
| 20000 | 100.3 | 102.9 | 103.7 | 102.7 | 105.5 | 105.3 | 102.5 | 104.5 | 108.1 | 107.5 | 105.0 | 100.9 | 102.9 | 152.3 |
| 25000 | 95.5 | 99.9 | 99.8 | 99.2 | 102.3 | 102.5 | 99.6 | 99.5 | 104.1 | 107.4 | 101.5 | 96.4 | 97.9 | 151.8 |
| 31500 | 93.5 | 95.4 | 96.6 | 96.6 | 97.1 | 97.1 | 95.3 | 96.9 | 100.4 | 102.8 | 97.8 | 92.0 | 94.5 | 150.8 |
| 40000 | 88.5 | 89.2 | 91.8 | 91.5 | 95.2 | 95.0 | 90.4 | 91.8 | 96.6 | 97.1 | 91.9 | 87.3 | 88.7 | 150.4 |
| 50000 | 84.7 | 85.4 | 87.3 | 85.3 | 86.5 | 86.5 | 85.0 | 84.7 | 94.3 | 91.4 | 86.8 | 82.5 | 84.1 | 149.6 |
| 63000 | 76.6 | 77.2 | 78.4 | 77.6 | 77.4 | 78.4 | 78.8 | 78.8 | 89.4 | 89.3 | 83.4 | 75.8 | 77.5 | 149.8 |
| 80000 | 67.8 | 67.9 | 69.8 | 73.8 | 71.3 | 72.5 | 71.1 | 72.4 | 79.6 | 79.6 | 73.6 | 66.0 | 67.7 | 147.7 |

OASPL 119.8 120.1 119.8 119.1 118.9 119.6 119.1 121.1 128.2 131.2 133.2 129.7 126.4 169.0

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000
FREE JET VELOCITY (FT/SEC) 289.00
FREE JET DIAMETER (IN) 48.00
REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

TEST DATE 02-08-78
LOCATION C41 ANECH CH
TAPE NO. N292
AERO. RDG. ADH056
ALPHA 8859
PAMB 29.7230
TAMB 17.78
RELHUM 52.80

MODEL TEST POINT 0100
ACQUSTIC RANGE 12.2 M (40.0 FT) ARC
SIZE 132.4 SQ CM (20.52 SQ IN) - MODEL
FREE-JET SPEED 88.09 M/SEC (289.0 FPS)

ORIGINAL PAGE 18
OF POOR QUALITY

07/19/79 14.003

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, S@ 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X01110

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|------|------|-------|
| 50 | 72.2 | 74.6 | 74.7 | 75.5 | 76.7 | 77.8 | 78.6 | 79.2 | 88.2 | 95.7 | 97.3 | 96.0 | 89.9 | 171.6 |
| 63 | 73.5 | 75.4 | 76.9 | 77.6 | 77.5 | 78.9 | 79.4 | 80.7 | 90.7 | 96.0 | 99.0 | 96.4 | 89.6 | 172.5 |
| 80 | 74.5 | 76.4 | 78.1 | 78.6 | 80.9 | 80.3 | 80.6 | 82.8 | 92.8 | 98.1 | 101.0 | 97.7 | 90.0 | 174.3 |
| 100 | 75.5 | 78.0 | 79.3 | 80.5 | 80.6 | 82.4 | 82.1 | 84.4 | 95.0 | 98.5 | 101.5 | 96.9 | 89.3 | 174.6 |
| 125 | 78.5 | 79.6 | 80.7 | 82.2 | 82.4 | 83.4 | 83.9 | 85.9 | 95.2 | 97.3 | 102.7 | 96.5 | 87.3 | 175.0 |
| 160 | 82.2 | 82.9 | 84.0 | 85.1 | 85.0 | 86.5 | 85.2 | 87.2 | 96.8 | 98.8 | 103.3 | 95.8 | 87.8 | 175.9 |
| 200 | 84.3 | 88.9 | 87.1 | 90.5 | 86.9 | 87.1 | 87.0 | 88.8 | 99.5 | 102.0 | 102.5 | 94.0 | 86.5 | 176.8 |
| 250 | 92.3 | 93.0 | 92.7 | 93.4 | 91.3 | 87.4 | 86.5 | 89.2 | 99.7 | 102.4 | 100.3 | 91.7 | 85.0 | 176.8 |
| 315 | 88.2 | 91.4 | 93.2 | 92.2 | 93.2 | 93.2 | 89.4 | 90.6 | 99.2 | 100.4 | 98.8 | 90.5 | 83.0 | 176.1 |
| 400 | 86.3 | 89.2 | 90.9 | 88.8 | 89.9 | 92.7 | 91.8 | 91.5 | 97.6 | 98.2 | 96.7 | 87.8 | 80.5 | 174.7 |
| 500 | 85.6 | 88.2 | 88.2 | 87.7 | 87.9 | 89.5 | 91.2 | 91.4 | 97.3 | 98.2 | 96.4 | 85.3 | 78.6 | 174.3 |
| 630 | 83.4 | 85.8 | 87.5 | 87.5 | 87.8 | 89.2 | 89.6 | 91.8 | 97.3 | 97.4 | 94.2 | 84.3 | 77.3 | 174.2 |
| 800 | 82.9 | 84.8 | 86.1 | 86.8 | 87.3 | 89.9 | 89.8 | 92.3 | 96.2 | 95.9 | 93.0 | 82.2 | 75.2 | 173.8 |
| 1000 | 81.0 | 84.0 | 86.4 | 86.4 | 87.6 | 89.2 | 89.9 | 91.2 | 95.0 | 95.3 | 91.4 | 80.5 | 72.6 | 173.5 |
| 1250 | 79.7 | 84.2 | 85.0 | 86.5 | 87.8 | 89.4 | 88.4 | 90.6 | 92.8 | 93.2 | 89.1 | 78.2 | 70.0 | 172.8 |
| 1600 | 77.0 | 81.8 | 84.6 | 84.7 | 86.6 | 87.3 | 86.5 | 88.4 | 90.4 | 91.2 | 85.5 | 78.0 | 66.8 | 171.9 |
| 2000 | 73.5 | 78.7 | 81.5 | 84.3 | 86.2 | 87.2 | 85.2 | 86.7 | 87.8 | 87.6 | 81.1 | 72.2 | 61.9 | 171.2 |
| 2500 | 71.2 | 77.5 | 80.7 | 81.2 | 84.6 | 84.9 | 81.8 | 83.0 | 85.1 | 82.1 | 75.9 | 65.7 | 56.4 | 170.7 |
| 3150 | 63.0 | 72.0 | 74.5 | 76.1 | 80.3 | 80.8 | 77.6 | 76.5 | 79.2 | 79.6 | 69.0 | 58.2 | 43.0 | 170.1 |
| 4000 | 54.8 | 62.8 | 67.9 | 70.3 | 72.1 | 72.5 | 70.2 | 70.6 | 71.7 | 70.3 | 59.1 | 42.9 | 25.0 | 169.1 |
| 5000 | 40.0 | 49.1 | 56.8 | 59.7 | 65.2 | 65.5 | 60.4 | 60.1 | 61.7 | 57.0 | 43.4 | 24.5 | | 168.8 |
| 6300 | 18.5 | 31.0 | 40.3 | 42.7 | 46.4 | 47.2 | 44.9 | 42.1 | 47.3 | 37.0 | 20.6 | | | 167.9 |
| 8000 | | | | | | | | | | | | | | 168.1 |
| 10000 | | | | | | | | | | | | | | 166.1 |

ORIGINAL PAGE IS
OF POOR QUALITY

OASPL 96.9 98.8 99.7 99.9 100.0 100.8 100.1 101.5 105.4 110.4 111.2 105.3 97.9 187.2
 PWL 102.4 104.8 106.3 106.7 108.3 109.0 107.6 109.0 114.0 115.4 114.0 105.9 98.2
 PNLT 103.0 104.8 107.1 107.3 109.6 110.2 107.6 109.0 114.7 115.4 114.0 105.8 98.2

DIAMETER RATIO 8.260 FREQUENCY SHIFT -9

TEST DATE 02-08-78 TAPE NO. N292 IALPHA SB59 TANG 17.78
 LOCATION C41 ANECH CH AERG. RDG. ADH056 PAMB 29.7230 RELHUM 92.60

MODEL TEST POINT 0100 0111 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CH (1400.00 SQ IN) - FULL FREE JET SPEED 66.09 M/S/EC (289.0 FPS)

07/19/79 14.693

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X01120
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 85.4 | 89.2 | 87.7 | 89.0 | 89.9 | 92.0 | 94.9 | 97.1 | 102.1 | 106.9 | 112.3 | 116.0 | 116.9 | 149.0 |
| 315 | 87.1 | 88.6 | 89.1 | 89.4 | 91.5 | 93.6 | 94.0 | 96.4 | 104.2 | 109.7 | 114.1 | 117.6 | 116.7 | 150.3 |
| 400 | 88.9 | 89.7 | 91.1 | 90.2 | 92.1 | 94.4 | 95.3 | 97.5 | 105.5 | 113.8 | 117.7 | 118.8 | 114.3 | 152.3 |
| 500 | 89.2 | 90.5 | 91.6 | 92.3 | 93.1 | 95.3 | 96.9 | 99.1 | 107.0 | 116.1 | 120.0 | 118.7 | 112.1 | 153.6 |
| 630 | 91.1 | 91.9 | 93.4 | 93.2 | 95.0 | 96.9 | 98.0 | 101.4 | 109.4 | 117.2 | 121.1 | 118.0 | 109.4 | 154.2 |
| 800 | 94.4 | 94.4 | 95.2 | 95.5 | 96.0 | 97.9 | 99.3 | 103.2 | 111.9 | 118.5 | 122.4 | 117.1 | 108.0 | 155.2 |
| 1000 | 99.0 | 99.5 | 98.3 | 98.1 | 98.1 | 99.8 | 100.9 | 104.6 | 113.5 | 118.6 | 121.7 | 115.7 | 106.6 | 155.0 |
| 1250 | 103.3 | 104.6 | 103.7 | 100.9 | 101.0 | 101.9 | 102.5 | 106.2 | 115.1 | 118.7 | 123.4 | 115.5 | 105.4 | 156.1 |
| 1600 | 106.9 | 106.8 | 107.8 | 106.1 | 102.4 | 103.6 | 104.4 | 108.1 | 117.0 | 120.4 | 124.4 | 115.6 | 107.1 | 157.6 |
| 2000 | 104.9 | 106.4 | 107.2 | 107.9 | 107.3 | 104.1 | 105.0 | 109.2 | 117.2 | 119.2 | 124.0 | 115.8 | 107.4 | 158.4 |
| 2500 | 101.5 | 103.1 | 104.8 | 105.8 | 107.4 | 109.5 | 107.4 | 110.3 | 119.0 | 122.7 | 122.1 | 114.8 | 106.6 | 157.8 |
| 3150 | 101.1 | 102.4 | 102.1 | 103.6 | 104.7 | 107.8 | 109.7 | 110.9 | 118.8 | 122.0 | 120.9 | 113.9 | 106.3 | 157.1 |
| 4000 | 99.6 | 101.2 | 102.2 | 101.7 | 103.0 | 105.6 | 108.5 | 111.5 | 118.4 | 120.1 | 118.8 | 111.4 | 103.9 | 155.8 |
| 5000 | 99.7 | 100.3 | 101.3 | 101.8 | 102.9 | 105.2 | 107.9 | 111.6 | 117.2 | 119.2 | 116.1 | 109.8 | 102.5 | 155.1 |
| 6300 | 99.2 | 100.6 | 101.6 | 101.3 | 103.1 | 106.2 | 107.4 | 111.3 | 116.7 | 118.5 | 116.5 | 108.3 | 102.3 | 154.6 |
| 8000 | 99.3 | 101.0 | 100.8 | 101.2 | 102.8 | 104.7 | 106.7 | 110.3 | 115.7 | 117.1 | 115.4 | 108.6 | 100.6 | 153.8 |
| 10000 | 97.5 | 99.8 | 100.7 | 100.8 | 103.4 | 105.3 | 105.7 | 109.8 | 114.4 | 116.4 | 113.0 | 105.6 | 99.2 | 153.3 |
| 12500 | 95.3 | 98.1 | 98.8 | 99.9 | 102.2 | 104.1 | 104.8 | 107.6 | 112.3 | 113.0 | 111.0 | 103.3 | 97.5 | 151.7 |
| 16000 | 93.5 | 96.7 | 98.1 | 99.4 | 101.8 | 103.8 | 103.0 | 106.7 | 109.3 | 112.3 | 108.7 | 102.2 | 95.9 | 151.6 |
| 20000 | 89.7 | 94.3 | 94.6 | 96.7 | 100.5 | 102.1 | 100.2 | 103.3 | 106.6 | 108.4 | 105.3 | 98.8 | 94.1 | 150.2 |
| 25000 | 88.3 | 90.4 | 92.6 | 92.7 | 97.8 | 99.2 | 97.5 | 97.8 | 104.1 | 103.7 | 100.5 | 95.3 | 92.4 | 148.9 |
| 31500 | 86.3 | 86.6 | 90.1 | 91.7 | 92.5 | 93.5 | 93.5 | 95.5 | 99.6 | 102.7 | 96.5 | 90.0 | 86.9 | 148.8 |
| 40000 | 81.3 | 82.0 | 84.8 | 86.0 | 90.5 | 91.2 | 88.1 | 90.6 | 95.0 | 96.4 | 91.9 | 85.5 | 82.5 | 147.9 |
| 50000 | 74.4 | 74.9 | 77.6 | 79.3 | 82.0 | 83.5 | 82.5 | 83.4 | 90.9 | 90.1 | 85.7 | 80.0 | 76.4 | 146.3 |
| 63000 | 68.7 | 68.6 | 71.0 | 72.9 | 73.8 | 74.9 | 77.0 | 76.8 | 86.9 | 84.6 | 79.1 | 73.9 | 70.5 | 146.2 |
| 80000 | 62.2 | 61.4 | 64.6 | 67.6 | 66.6 | 69.8 | 68.8 | 71.2 | 81.3 | 80.1 | 74.1 | 65.1 | 62.5 | 147.6 |
| GASPL | 112.8 | 113.9 | 114.6 | 114.6 | 115.3 | 117.0 | 117.8 | 121.0 | 128.1 | 131.4 | 132.9 | 127.8 | 122.3 | 168.1 |

ORIGINAL PAGE IS
OF POOR QUALITYTEST DATE 02-08-78 TAPE NO. N292 ALPHA SB59 TAMB 17.78
LOCATION C41 ANECH CH AERD. RDG. ADH055 PAMB 29.7170 RELHUM 52.80MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 132.4 SQ CM (20.52 SQ IN) - MODEL 117.04 M/SEC (384.0 FPS) SIZE
G100 0112

07/19/79 14.683

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMIDL X01120

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PUL

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | 92.0 | 94.7 | 92.0 | 91.9 | 91.3 | 92.0 | 93.1 | 93.6 | 100.6 | 105.5 | 109.4 | 113.3 | 113.2 | 146.5 |
| 63 | 92.0 | 94.7 | 92.0 | 91.9 | 93.2 | 93.6 | 92.7 | 93.7 | 103.3 | 111.0 | 114.6 | 116.4 | 114.3 | 149.9 |
| 80 | 94.4 | 94.7 | 93.8 | 92.7 | 93.7 | 94.7 | 94.5 | 95.7 | 105.2 | 113.9 | 117.9 | 118.0 | 114.9 | 152.2 |
| 100 | 95.6 | 95.4 | 95.6 | 93.3 | 95.0 | 95.6 | 96.1 | 97.2 | 107.5 | 115.0 | 119.1 | 118.1 | 114.1 | 152.9 |
| 125 | 96.5 | 96.6 | 96.3 | 95.6 | 96.9 | 97.2 | 97.1 | 99.3 | 110.3 | 116.6 | 120.9 | 118.3 | 115.2 | 154.3 |
| 160 | 98.4 | 98.0 | 96.2 | 96.5 | 97.7 | 96.4 | 98.4 | 101.1 | 112.4 | 117.3 | 121.0 | 118.3 | 116.4 | 154.8 |
| 200 | 100.0 | 99.3 | 99.2 | 98.3 | 99.7 | 100.4 | 100.2 | 102.6 | 113.8 | 117.2 | 122.4 | 117.9 | 115.0 | 155.5 |
| 250 | 104.7 | 104.2 | 101.8 | 100.6 | 102.7 | 102.6 | 101.9 | 104.3 | 116.0 | 119.1 | 123.6 | 118.1 | 116.8 | 156.9 |
| 315 | 109.7 | 109.9 | 107.6 | 103.7 | 104.3 | 104.5 | 104.0 | 106.4 | 118.2 | 121.6 | 123.3 | 118.4 | 117.1 | 157.9 |
| 400 | 113.4 | 112.1 | 111.9 | 109.0 | 109.3 | 105.3 | 104.8 | 107.7 | 118.5 | 121.8 | 121.7 | 117.6 | 116.4 | 157.9 |
| 500 | 109.7 | 110.7 | 110.8 | 110.8 | 110.2 | 111.0 | 107.5 | 109.1 | 118.6 | 121.7 | 121.1 | 117.2 | 116.9 | 157.8 |
| 630 | 108.8 | 109.4 | 110.0 | 109.8 | 107.8 | 109.7 | 110.2 | 110.1 | 118.9 | 120.3 | 119.3 | 114.9 | 114.1 | 156.8 |
| 800 | 108.3 | 108.7 | 107.4 | 107.8 | 106.5 | 108.0 | 109.5 | 111.2 | 118.0 | 119.6 | 118.8 | 113.3 | 112.7 | 156.1 |
| 1000 | 106.8 | 107.6 | 107.7 | 106.1 | 106.8 | 108.2 | 109.4 | 111.7 | 117.6 | 118.9 | 117.2 | 111.9 | 112.5 | 155.6 |
| 1250 | 106.8 | 106.7 | 106.9 | 106.5 | 107.1 | 109.2 | 108.9 | 111.4 | 116.8 | 117.7 | 116.3 | 110.3 | 111.0 | 156.0 |
| 1600 | 106.2 | 106.9 | 107.1 | 105.9 | 106.7 | 107.7 | 108.2 | 110.4 | 115.6 | 117.1 | 114.1 | 109.5 | 109.8 | 154.4 |
| 2000 | 106.1 | 107.1 | 106.1 | 105.6 | 107.4 | 108.3 | 107.2 | 109.9 | 113.8 | 114.1 | 112.3 | 107.5 | 108.4 | 153.4 |
| 2500 | 104.0 | 105.6 | 105.8 | 104.9 | 106.7 | 107.1 | 106.8 | 107.6 | 111.3 | 113.8 | 110.5 | 107.0 | 107.3 | 153.0 |
| 3150 | 103.9 | 105.6 | 104.9 | 104.6 | 106.4 | 106.8 | 104.8 | 106.8 | 109.5 | 110.8 | 108.2 | 104.9 | 107.5 | 152.8 |
| 4000 | 101.8 | 103.8 | 103.8 | 103.7 | 105.0 | 105.1 | 102.2 | 103.8 | 108.4 | 107.8 | 105.2 | 103.3 | 107.5 | 152.7 |
| 5000 | 97.4 | 100.8 | 99.7 | 100.4 | 102.4 | 102.2 | 99.8 | 99.0 | 103.5 | 106.1 | 100.2 | 96.6 | 100.1 | 151.5 |
| 6300 | 95.1 | 96.1 | 97.0 | 95.6 | 96.5 | 96.6 | 95.1 | 95.7 | 100.4 | 101.4 | 97.4 | 94.3 | 98.7 | 150.6 |
| 8000 | 89.7 | 89.3 | 92.0 | 92.7 | 95.0 | 94.2 | 90.2 | 91.3 | 96.4 | 95.2 | 91.2 | 88.7 | 92.4 | 150.1 |
| 10000 | 86.9 | 86.5 | 87.9 | 87.7 | 86.5 | 86.5 | 84.5 | 84.0 | 93.1 | 80.3 | 85.1 | 82.7 | 86.0 | 149.3 |
| 12500 | 79.0 | 78.4 | 79.8 | 80.0 | 77.7 | 77.9 | 78.7 | 77.2 | 89.0 | 87.2 | 81.5 | 75.4 | 79.5 | 149.1 |
| 16000 | 69.3 | 68.5 | 70.0 | 71.0 | 71.1 | 72.8 | 70.6 | 71.6 | 79.2 | 77.4 | 71.7 | 65.6 | 69.7 | 146.8 |

GASPL 119.4 119.6 119.3 118.3 118.6 119.2 118.7 120.6 128.2 130.8 132.2 128.7 127.1 168.4

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 364.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-08-78 TAPE NO. N292 ALPHA 9859 TAMB 17.78
LOCATION C41 ANECH CH AERO. RDG. ADH055 PAMB 29.7170 RELHUM 52.80

MODEL TEST POINT 0100 0112 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 132.4 SQ CH (20.52 SQ IN) - MODEL 117.04 M/SEC (384.0 FPS) FREE-JET SPEED

ORIGINAL PAGE 13
OF POOR QUALITY

07/19/79 14.663

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X01125

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|------|------|-------|
| 50 | 73.3 | 75.1 | 75.3 | 74.9 | 76.4 | 77.4 | 77.2 | 77.9 | 86.7 | 94.4 | 96.8 | 94.7 | 88.2 | 170.5 |
| 63 | 74.5 | 75.8 | 77.1 | 75.5 | 77.6 | 78.3 | 78.7 | 79.4 | 89.0 | 95.4 | 98.0 | 94.8 | 87.4 | 171.3 |
| 80 | 75.4 | 77.0 | 77.8 | 77.8 | 79.4 | 80.0 | 79.7 | 81.5 | 91.8 | 96.9 | 99.7 | 94.9 | 88.4 | 172.7 |
| 100 | 77.2 | 78.3 | 79.6 | 78.6 | 80.3 | 81.0 | 80.9 | 83.2 | 93.8 | 97.6 | 99.8 | 94.8 | 89.4 | 173.1 |
| 125 | 78.6 | 79.6 | 80.5 | 80.4 | 82.1 | 82.9 | 82.6 | 84.7 | 95.1 | 97.4 | 101.0 | 94.2 | 87.8 | 173.8 |
| 160 | 83.1 | 84.2 | 83.0 | 82.5 | 85.0 | 85.1 | 84.2 | 86.2 | 97.1 | 99.2 | 102.0 | 94.2 | 89.3 | 175.2 |
| 200 | 87.9 | 89.7 | 88.6 | 85.4 | 86.4 | 86.8 | 86.1 | 88.1 | 99.2 | 101.5 | 101.5 | 94.2 | 89.1 | 176.3 |
| 250 | 91.2 | 91.7 | 92.6 | 90.5 | 91.3 | 87.4 | 86.8 | 89.2 | 99.2 | 101.4 | 99.6 | 92.9 | 87.7 | 176.2 |
| 315 | 87.2 | 90.0 | 91.3 | 92.1 | 91.9 | 92.9 | 89.2 | 90.4 | 99.2 | 100.9 | 98.5 | 92.0 | 87.4 | 176.2 |
| 400 | 85.8 | 88.2 | 90.1 | 90.8 | 89.2 | 91.3 | 91.6 | 91.1 | 99.0 | 99.1 | 96.3 | 88.0 | 83.8 | 175.1 |
| 500 | 84.8 | 87.2 | 87.2 | 88.4 | 87.6 | 89.3 | 90.7 | 91.8 | 97.8 | 98.0 | 95.2 | 86.9 | 81.2 | 174.4 |
| 630 | 82.8 | 85.6 | 87.1 | 86.5 | 87.7 | 89.2 | 90.2 | 92.0 | 97.1 | 96.9 | 93.2 | 84.7 | 80.0 | 173.9 |
| 800 | 82.3 | 84.4 | 86.1 | 85.6 | 87.7 | 90.0 | 89.5 | 91.5 | 95.9 | 95.3 | 91.7 | 82.4 | 77.4 | 173.3 |
| 1000 | 81.2 | 84.2 | 86.0 | 85.8 | 87.2 | 88.3 | 88.7 | 90.3 | 94.5 | 89.1 | 81.0 | 75.0 | 72.7 | 172.7 |
| 1250 | 80.7 | 84.1 | 84.8 | 85.3 | 87.7 | 88.9 | 87.6 | 89.6 | 92.5 | 91.1 | 86.9 | 78.1 | 72.2 | 171.7 |
| 1600 | 77.6 | 82.1 | 84.0 | 84.3 | 86.7 | 87.3 | 86.4 | 87.9 | 89.6 | 90.3 | 84.2 | 76.2 | 68.7 | 171.3 |
| 2000 | 76.6 | 81.4 | 82.8 | 83.7 | 86.2 | 87.0 | 84.5 | 86.1 | 87.3 | 86.6 | 80.9 | 72.6 | 65.8 | 171.1 |
| 2500 | 72.7 | 78.4 | 80.8 | 82.2 | 84.3 | 84.7 | 81.5 | 82.3 | 85.4 | 82.4 | 76.1 | 68.1 | 61.0 | 171.0 |
| 3150 | 64.9 | 73.0 | 74.8 | 77.3 | 80.3 | 80.5 | 77.8 | 75.9 | 78.6 | 78.2 | 67.7 | 58.4 | 45.2 | 169.8 |
| 4000 | 56.4 | 63.5 | 68.3 | 69.3 | 71.5 | 72.0 | 70.1 | 69.4 | 71.7 | 68.8 | 58.7 | 45.3 | 29.3 | 168.8 |
| 5000 | 41.2 | 49.2 | 57.0 | 60.9 | 65.0 | 64.8 | 60.2 | 59.6 | 61.5 | 55.1 | 42.8 | 25.9 | 1.1 | 168.8 |
| 6300 | 20.7 | 32.2 | 40.9 | 45.1 | 46.4 | 47.2 | 44.4 | 41.5 | 46.1 | 35.9 | 18.8 | | | 167.8 |
| 8000 | | | 11.4 | 18.2 | 19.5 | 20.8 | 20.5 | 15.4 | 20.6 | 8.1 | | | | 165.2 |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

ORIGINAL PAGE IS
OF POOR QUALITY

OASPL 96.3 98.2 99.2 98.9 99.6 100.3 99.7 101.0 108.3 110.0 110.1 104.1 98.3 186.7

PNL 102.1 104.4 105.7 106.3 107.9 108.6 107.1 108.3 114.1 114.9 113.0 105.8 100.2

PNLT 102.7 104.4 106.4 106.9 109.3 109.8 107.1 108.3 114.7 114.9 113.0 105.8 101.5

DIAMETER RATIO 8.260 FREQUENCY S'IFT -9

TEST DATE 02-08-78
LOCATION C41 ANECH CHTAPE NO. N292
AERO. RDG. ADH055ALPHA SB59
PAMB 29.7170TAMB 17.78
RELHUM 52.60MODEL TEST POINT
Q100 0112ACOUSTIC RANGE
731.5 M (2400.0 FT) SLSIZE
9032.2 SQ CM (1400.00 SQ IN) - FULLFREE-JET SPEED
117.04 M/SEC (384.0 FPS)

07/19/79 18.690

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X01130
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50
60
63
80

100
125
160
200

250 83.3 87.8 86.6 86.9 87.7 89.8 92.0 93.9 99.1 103.4 108.5 110.7 111.1 144.9
315 84.6 87.2 87.7 89.8 91.4 91.8 92.0 94.2 100.9 106.3 110.4 112.8 112.0 146.3
400 85.9 88.4 89.2 88.3 89.3 91.5 92.8 95.0 102.2 109.3 112.4 113.6 112.0 147.6
500 86.7 89.5 90.3 89.6 91.4 93.0 94.2 96.6 103.3 110.4 113.5 114.2 112.8 148.6
630 87.3 90.9 90.9 90.9 96.8 94.4 96.0 98.4 105.4 110.7 114.1 114.8 113.4 149.2
800 91.4 90.7 92.4 92.7 93.6 95.7 96.8 100.0 107.2 111.5 113.9 115.3 114.2 149.7
1000 94.2 95.3 95.8 94.3 94.9 96.8 98.2 101.1 108.8 111.6 112.8 114.4 113.6 149.4
1250 91.1 94.9 95.7 95.0 96.3 98.2 98.5 102.2 108.6 111.3 113.1 114.8 112.9 149.5
1600 93.4 93.3 94.3 94.4 95.9 98.3 99.4 102.6 109.0 110.9 112.6 113.8 112.8 149.1
2000 94.1 96.9 96.2 95.2 95.5 97.9 99.0 103.4 109.1 110.8 112.2 112.9 110.7 148.6
2500 92.8 94.3 95.3 95.6 96.4 97.8 100.2 103.3 108.5 111.2 112.6 112.6 109.3 148.6
3150 93.3 96.1 95.3 95.8 96.4 98.8 99.7 104.1 109.2 109.7 111.1 108.3 148.1
4000 93.0 94.3 95.1 95.1 96.2 98.5 99.7 103.4 108.3 109.2 111.4 109.6 106.8 147.3
5000 92.6 94.4 94.7 94.7 96.0 98.6 100.2 103.4 107.8 108.6 110.5 109.4 106.9 147.0
6300 90.8 93.9 94.6 94.6 95.9 99.0 99.7 103.4 107.3 108.0 108.6 108.8 106.3 146.8
8000 90.4 94.2 93.8 95.2 96.0 98.2 99.0 102.1 105.7 106.6 107.7 107.1 105.7 145.9
10000 88.5 93.3 94.4 94.3 96.4 98.4 98.2 101.8 105.1 105.8 106.3 106.6 104.5 145.5
12500 85.5 91.3 92.5 93.1 95.7 97.3 97.0 100.4 103.0 103.2 103.7 104.1 102.5 144.2
16000 83.7 89.7 91.5 92.6 95.3 96.8 95.5 98.1 100.8 101.9 101.1 102.7 101.2 143.9
20000 78.5 86.7 88.0 89.7 93.7 95.6 92.2 95.3 97.6 98.0 98.5 99.1 97.6 142.7
25000 77.0 81.8 85.3 85.4 90.8 92.2 90.0 90.2 94.6 93.6 94.5 95.0 95.8 141.5
31500 75.5 78.3 82.0 84.2 85.8 86.8 85.9 87.7 90.3 92.0 91.2 90.8 89.1 140.9
40000 70.0 73.5 76.4 78.5 83.2 84.5 80.3 82.3 85.4 86.5 86.6 85.0 85.0 140.2
50000 62.6 66.3 69.3 71.8 74.7 76.2 74.9 75.4 81.3 79.7 80.6 79.4 78.9 138.3
63000 56.5 60.0 62.9 65.1 65.5 67.9 68.9 68.2 76.8 73.2 74.8 74.1 73.7 137.7
80000 50.6 53.8 56.3 60.1 59.0 62.5 61.5 62.7 70.7 67.6 70.7 68.2 66.2 138.8

OASPL 103.7 106.1 106.6 106.6 108.2 110.1 110.9 114.2 119.6 122.1 124.2 125.0 123.5 160.8

TEST DATE 02-07-78 TAPE NO. N291 ALPHA SB59 TAMB 14.36
LOCATION C41 ANECH CH AERO. RDG. ADH050 PAMB 29.7001 RELHUM 46.30

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 132.4 SQ CM (20.52 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

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ORIGINAL PAGE 10
OF POOR QUALITY

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X01130

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ
50
63
80
100

125
160
200

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 83.3 | 87.8 | 86.6 | 86.9 | 87.7 | 89.8 | 92.0 | 93.9 | 99.1 | 103.4 | 108.5 | 110.7 | 111.1 | 144.5 |
| 315 | 84.6 | 87.2 | 87.7 | 89.3 | 89.3 | 91.4 | 91.8 | 94.2 | 100.9 | 106.3 | 110.4 | 112.6 | 112.0 | 146.3 |
| 400 | 85.9 | 88.4 | 89.2 | 88.3 | 89.3 | 91.5 | 92.8 | 95.6 | 102.2 | 108.3 | 112.4 | 113.6 | 112.0 | 147.6 |
| 500 | 86.7 | 89.5 | 90.3 | 89.6 | 91.4 | 93.0 | 94.2 | 96.6 | 103.3 | 110.4 | 113.5 | 114.2 | 112.8 | 148.6 |
| 630 | 87.9 | 90.9 | 90.9 | 90.9 | 96.8 | 94.4 | 96.0 | 98.4 | 105.4 | 110.7 | 114.1 | 114.8 | 113.4 | 149.2 |
| 800 | 91.4 | 90.7 | 92.4 | 92.7 | 93.6 | 95.7 | 96.8 | 100.0 | 107.2 | 111.5 | 113.9 | 115.3 | 114.2 | 149.7 |
| 1000 | 94.2 | 95.3 | 95.8 | 94.3 | 94.9 | 96.8 | 98.2 | 101.1 | 108.8 | 111.6 | 112.8 | 114.4 | 113.6 | 149.4 |
| 1250 | 91.1 | 94.9 | 95.7 | 95.0 | 96.3 | 98.2 | 98.5 | 102.2 | 108.6 | 111.3 | 113.1 | 114.8 | 112.9 | 149.5 |
| 1600 | 93.4 | 93.3 | 94.3 | 94.4 | 95.9 | 98.3 | 99.4 | 102.6 | 109.0 | 110.9 | 112.6 | 113.8 | 112.8 | 149.1 |
| 2000 | 94.1 | 96.9 | 96.2 | 95.2 | 95.5 | 97.9 | 99.0 | 103.4 | 109.1 | 110.8 | 112.2 | 112.9 | 110.7 | 148.6 |
| 2500 | 92.8 | 94.3 | 95.3 | 95.6 | 96.4 | 97.8 | 100.2 | 103.3 | 108.5 | 111.2 | 112.6 | 112.6 | 109.3 | 148.6 |
| 3150 | 93.3 | 96.1 | 95.3 | 95.8 | 96.4 | 98.8 | 99.7 | 104.1 | 109.2 | 109.7 | 112.1 | 111.1 | 108.3 | 148.1 |
| 4000 | 93.0 | 94.3 | 95.1 | 95.1 | 96.2 | 98.5 | 99.7 | 103.4 | 108.3 | 109.2 | 111.4 | 109.6 | 106.8 | 147.3 |
| 5000 | 92.6 | 94.7 | 94.7 | 94.7 | 96.0 | 98.6 | 100.2 | 103.4 | 107.8 | 108.6 | 110.8 | 109.4 | 106.9 | 147.0 |
| 6300 | 90.8 | 93.9 | 94.6 | 94.6 | 95.9 | 99.0 | 99.7 | 103.4 | 107.3 | 108.0 | 108.6 | 108.9 | 106.3 | 146.5 |
| 8000 | 90.4 | 94.2 | 93.8 | 95.2 | 96.0 | 98.2 | 99.0 | 102.1 | 106.7 | 106.6 | 107.7 | 107.1 | 105.7 | 145.9 |
| 10000 | 88.5 | 93.3 | 94.4 | 94.3 | 96.4 | 98.8 | 98.2 | 101.8 | 105.1 | 105.8 | 106.3 | 106.6 | 104.5 | 145.5 |
| 12500 | 85.5 | 91.3 | 92.5 | 93.1 | 95.7 | 97.3 | 97.0 | 100.4 | 103.0 | 103.2 | 103.7 | 104.1 | 102.5 | 144.2 |
| 16000 | 83.7 | 89.7 | 91.5 | 92.6 | 95.3 | 96.8 | 95.5 | 98.1 | 100.8 | 101.9 | 101.1 | 102.7 | 101.2 | 143.9 |
| 20000 | 78.5 | 86.7 | 88.0 | 89.7 | 93.7 | 95.6 | 92.2 | 95.3 | 97.6 | 98.0 | 98.5 | 99.1 | 97.6 | 142.7 |
| 25000 | 77.0 | 81.8 | 85.3 | 85.4 | 90.8 | 92.2 | 90.0 | 90.2 | 94.6 | 93.6 | 94.5 | 95.0 | 95.8 | 141.5 |
| 31500 | 75.5 | 78.3 | 82.0 | 84.2 | 85.8 | 86.8 | 85.9 | 87.7 | 90.3 | 92.0 | 91.2 | 90.8 | 89.1 | 140.9 |
| 40000 | 70.0 | 73.5 | 76.4 | 78.5 | 83.2 | 84.5 | 80.3 | 82.3 | 85.4 | 86.5 | 86.6 | 85.0 | 85.0 | 140.2 |
| 50000 | 62.6 | 66.3 | 69.3 | 71.8 | 74.7 | 76.2 | 74.9 | 75.4 | 81.3 | 79.7 | 80.6 | 79.4 | 78.9 | 138.3 |
| 63000 | 56.5 | 60.0 | 62.9 | 65.1 | 65.5 | 67.9 | 68.9 | 68.2 | 76.8 | 73.2 | 74.8 | 74.1 | 73.7 | 137.7 |
| 80000 | 50.6 | 53.6 | 56.3 | 60.1 | 59.0 | 62.5 | 61.5 | 62.7 | 70.7 | 67.6 | 70.7 | 68.2 | 66.2 | 136.8 |

GASPL 103.7 106.1 106.6 106.6 108.2 110.1 110.9 114.2 119.6 122.1 124.2 125.0 123.5 160.8

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES TURBULANCE CORRECTION - YES

TEST DATE 02-07-78 TAPE NO. N291 ALPHA SB59 TAMB 14.38
LOCATION C41 ANECH CH AERO. RDG. ADH050 PAMB 29.7001 RELHUM 46.30

MODEL TEST POINT 0100 0113 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 132.4 SQ CM (20.52 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (O. FPS)

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OF POOR QUALITY

07/19/79 18.692

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X01135

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PNL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 64.8 | 68.9 | 70.7 | 70.5 | 72.0 | 74.2 | 75.5 | 77.2 | 83.7 | 89.7 | 91.3 | 90.3 | 85.4 | 166.0 |
| 63 | 65.6 | 69.9 | 71.8 | 71.8 | 74.0 | 75.8 | 76.8 | 78.8 | 84.8 | 90.8 | 92.4 | 90.8 | 86.1 | 165.9 |
| 80 | 66.7 | 71.3 | 72.4 | 73.1 | 79.4 | 77.1 | 78.6 | 80.6 | 86.9 | 91.1 | 92.9 | 91.4 | 86.6 | 167.6 |
| 100 | 70.1 | 71.0 | 73.8 | 74.8 | 76.1 | 78.4 | 79.4 | 82.1 | 88.6 | 91.8 | 92.6 | 91.8 | 87.3 | 168.1 |
| 125 | 72.9 | 75.5 | 77.1 | 76.4 | 77.4 | 79.4 | 80.6 | 83.1 | 90.1 | 91.8 | 91.4 | 90.8 | 86.4 | 167.7 |
| 160 | 69.5 | 75.0 | 76.8 | 76.9 | 78.6 | 80.6 | 80.9 | 84.1 | 89.7 | 91.3 | 91.6 | 90.9 | 85.4 | 167.8 |
| 200 | 71.6 | 73.2 | 75.3 | 76.1 | 78.1 | 80.6 | 81.8 | 84.4 | 90.0 | 90.8 | 90.8 | 89.6 | 84.8 | 167.5 |
| 250 | 72.0 | 76.5 | 76.9 | 76.7 | 77.5 | 80.0 | 81.0 | 85.0 | 89.8 | 90.4 | 90.1 | 88.3 | 82.0 | 167.0 |
| 315 | 70.2 | 73.5 | 75.8 | 76.8 | 78.1 | 79.5 | 81.9 | 84.6 | 88.9 | 90.4 | 90.1 | 87.3 | 79.8 | 166.9 |
| 400 | 70.2 | 74.9 | 75.4 | 76.8 | 77.8 | 80.3 | 81.1 | 85.0 | 89.3 | 88.9 | 89.1 | 85.2 | 77.8 | 166.4 |
| 500 | 69.5 | 72.8 | 74.9 | 75.8 | 77.3 | 79.8 | 80.8 | 84.0 | 88.0 | 87.7 | 87.9 | 83.1 | 75.4 | 165.7 |
| 630 | 68.6 | 72.4 | 74.1 | 75.0 | 76.9 | 79.6 | 81.1 | 83.8 | 87.3 | 86.6 | 86.4 | 82.2 | 74.4 | 165.4 |
| 800 | 66.3 | 71.5 | 73.8 | 74.7 | 76.5 | 79.8 | 80.3 | 83.5 | 86.4 | 85.6 | 84.0 | 81.0 | 72.7 | 164.8 |
| 1000 | 65.4 | 71.6 | 72.7 | 75.1 | 76.5 | 78.8 | 79.5 | 82.0 | 85.6 | 83.9 | 82.7 | 78.6 | 70.8 | 164.2 |
| 1250 | 63.0 | 70.3 | 73.1 | 74.1 | 76.8 | 79.4 | 78.6 | 81.5 | 83.8 | 82.8 | 80.8 | 77.3 | 68.3 | 163.9 |
| 1600 | 59.2 | 67.7 | 70.7 | 72.5 | 75.7 | 77.6 | 77.1 | 79.8 | 81.2 | 79.6 | 77.4 | 73.3 | 63.9 | 162.6 |
| 2000 | 56.4 | 65.5 | 69.4 | 71.8 | 75.2 | 76.9 | 75.4 | 77.3 | 78.6 | 77.8 | 73.8 | 70.3 | 59.6 | 162.3 |
| 2500 | 49.4 | 61.3 | 65.0 | 68.2 | 73.0 | 75.2 | 71.5 | 73.8 | 74.6 | 72.6 | 69.4 | 63.9 | 51.1 | 161.0 |
| 3150 | 44.6 | 54.0 | 60.4 | 62.4 | 68.8 | 70.5 | 68.0 | 67.2 | 69.7 | 65.7 | 62.0 | 54.8 | 40.9 | 159.8 |
| 4000 | 36.8 | 45.7 | 53.3 | 57.9 | 60.7 | 62.2 | 60.9 | 61.4 | 61.6 | 59.5 | 52.5 | 41.7 | 19.7 | 159.2 |
| 5000 | 21.5 | 33.3 | 41.5 | 46.7 | 53.2 | 55.0 | 50.3 | 50.5 | 50.5 | 46.4 | 38.1 | 22.2 | | 158.5 |
| 6300 | 11.9 | 22.2 | 29.2 | 34.6 | 36.9 | 34.8 | 32.8 | 34.3 | 34.3 | 25.4 | 14.4 | | | 156.8 |
| 8000 | | | 3.3 | 7.2 | 10.8 | 10.7 | 6.4 | 8.4 | | | | | | 156.1 |
| 10000 | | | | | | | | | | | | | | 157.2 |

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GASPL 81.1 85.0 86.7 87.4 89.5 91.5 92.2 95.1 99.9 101.4 101.9 100.3 95.1 178.9
 PNL 84.9 90.2 92.7 94.4 97.3 99.4 98.8 101.3 105.1 105.3 104.8 102.0 95.8
 PNL 85.4 91.2 92.7 94.4 98.5 100.6 98.8 101.3 105.6 105.3 105.8 102.0 97.0

DIAMETER RATIO 8.260 FREQUENCY SHIFT -9

TEST DATE 02-07-78 TAPE NO. N291 ALPHA SB59 TAMP 14.36
 LOCATION C41 ANECH CH AERO. RDG. ADH050 PAMB 29.7001 RELIUM 46.30

MODEL TEST POINT ACQUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE FREE-JET SPEED
 0100 0113 0. M/SEC (0. FPS)

07/19/78 14.663

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X01140
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

150

200

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 79.0 | 83.0 | 81.5 | 82.6 | 83.7 | 86.0 | 87.9 | 89.6 | 94.8 | 99.4 | 104.0 | 107.0 | 108.9 | 140.4 |
| 315 | 80.6 | 83.1 | 83.3 | 83.4 | 85.0 | 87.4 | 87.8 | 89.9 | 96.7 | 102.5 | 106.1 | 109.1 | 106.5 | 142.1 |
| 400 | 82.6 | 84.4 | 85.3 | 84.2 | 85.6 | 87.7 | 88.8 | 90.7 | 98.2 | 105.5 | 108.4 | 109.8 | 105.5 | 143.5 |
| 500 | 83.2 | 84.8 | 85.9 | 85.6 | 86.9 | 88.5 | 90.4 | 92.1 | 99.8 | 106.9 | 110.0 | 109.9 | 102.8 | 144.3 |
| 630 | 83.8 | 85.6 | 86.6 | 86.2 | 87.5 | 89.1 | 91.5 | 94.7 | 101.9 | 107.0 | 110.1 | 108.8 | 99.2 | 144.2 |
| 800 | 86.1 | 86.2 | 87.2 | 88.5 | 89.0 | 91.4 | 93.0 | 96.0 | 103.9 | 108.3 | 109.4 | 106.8 | 95.5 | 144.1 |
| 1000 | 87.5 | 87.0 | 89.8 | 88.6 | 90.1 | 93.0 | 94.4 | 97.1 | 105.0 | 108.1 | 107.5 | 103.4 | 93.1 | 143.4 |
| 1250 | 85.8 | 89.1 | 90.1 | 90.4 | 91.5 | 93.9 | 94.8 | 98.4 | 105.5 | 108.5 | 108.6 | 101.5 | 91.2 | 143.9 |
| 1600 | 88.2 | 88.8 | 89.8 | 90.6 | 91.9 | 94.5 | 96.2 | 99.1 | 106.0 | 107.6 | 107.9 | 99.8 | 91.1 | 143.5 |
| 2000 | 87.6 | 89.1 | 89.9 | 90.4 | 91.8 | 93.4 | 96.0 | 99.2 | 106.1 | 108.3 | 107.2 | 99.4 | 90.9 | 143.6 |
| 2500 | 88.0 | 89.8 | 90.6 | 90.8 | 92.7 | 94.0 | 96.9 | 99.9 | 105.7 | 108.0 | 106.9 | 99.1 | 91.3 | 143.5 |
| 3150 | 88.3 | 90.6 | 90.7 | 91.4 | 93.0 | 95.1 | 97.2 | 100.4 | 105.8 | 107.0 | 106.7 | 100.1 | 91.6 | 143.3 |
| 4000 | 88.9 | 90.7 | 91.5 | 90.5 | 92.1 | 94.7 | 97.1 | 100.3 | 105.2 | 106.2 | 106.0 | 99.0 | 91.2 | 142.8 |
| 5000 | 89.8 | 91.1 | 91.2 | 90.9 | 92.7 | 95.3 | 97.2 | 100.1 | 104.6 | 106.1 | 105.9 | 98.6 | 92.1 | 142.8 |
| 6300 | 89.8 | 90.9 | 91.4 | 91.2 | 92.7 | 95.8 | 96.7 | 100.2 | 104.6 | 105.6 | 105.9 | 99.4 | 92.8 | 142.9 |
| 8000 | 90.9 | 91.8 | 91.2 | 90.8 | 92.6 | 95.0 | 96.8 | 99.6 | 104.1 | 104.7 | 105.3 | 98.2 | 92.5 | 142.7 |
| 10000 | 90.6 | 92.2 | 92.1 | 91.4 | 93.0 | 94.9 | 95.8 | 98.6 | 103.0 | 104.5 | 104.4 | 99.5 | 92.3 | 142.7 |
| 12500 | 87.6 | 91.0 | 91.4 | 91.3 | 92.6 | 94.5 | 94.9 | 97.5 | 100.7 | 102.4 | 102.1 | 97.9 | 91.4 | 141.7 |
| 16000 | 84.9 | 89.1 | 90.2 | 90.8 | 93.0 | 94.2 | 93.4 | 96.3 | 98.7 | 101.5 | 99.6 | 95.8 | 90.6 | 141.6 |
| 20000 | 79.9 | 86.2 | 86.7 | 87.8 | 91.9 | 92.7 | 90.5 | 93.7 | 96.5 | 98.1 | 96.2 | 92.5 | 87.7 | 140.7 |
| 25000 | 78.7 | 82.3 | 85.3 | 84.4 | 88.7 | 89.6 | 87.9 | 88.9 | 93.5 | 93.1 | 91.2 | 89.4 | 86.0 | 139.2 |
| 31500 | 76.7 | 78.3 | 82.0 | 82.9 | 83.7 | 84.5 | 84.1 | 86.4 | 89.3 | 91.1 | 88.2 | 83.7 | 80.8 | 138.9 |
| 40000 | 71.4 | 73.2 | 76.7 | 77.4 | 82.2 | 82.1 | 79.2 | 80.7 | 84.7 | 84.9 | 82.8 | 77.9 | 75.9 | 138.1 |
| 50000 | 64.3 | 66.6 | 68.8 | 71.0 | 73.7 | 74.7 | 74.1 | 73.8 | 79.6 | 77.3 | 76.9 | 72.4 | 70.0 | 135.9 |
| 63000 | 57.9 | 60.3 | 62.4 | 64.3 | 65.4 | 66.1 | 67.9 | 66.7 | 74.6 | 69.8 | 69.1 | 66.3 | 64.2 | 134.7 |
| 80000 | 52.9 | 53.1 | 56.4 | 59.1 | 57.8 | 60.7 | 59.7 | 60.7 | 67.0 | 63.5 | 63.0 | 57.5 | 56.0 | 134.6 |
| QASPL | 100.4 | 102.2 | 102.7 | 102.7 | 104.7 | 106.5 | 107.9 | 110.9 | 116.5 | 119.1 | 119.9 | 117.6 | 112.6 | 156.4 |

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TEST DATE 02-08-78 TAPE NO. N292 IALPHA SB59 TAMB 21.56
LOCATION C41 ANECH CH AERO. RDG. ADG061 PAMB 29.6810 RELHUM 48.70

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 132.4 SQ CM (20.52 SQ IN) - MODEL 87.17 M/SEC (286.0 FPS)
0100 0114

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X01140

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

CASPL

105.5

106.5

106.2

107.3

108.3

108.4

110.4

116.4

118.3

118.9

117.2

114.1

156.6

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 286.00 REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-08-78 TAPE NO. N292 ALPHA SB59 TAMB 21.56
 LOCATION C41 ANECH CH AERO. RDG. ADG061 PAMB 29.6610 RELHUM 48.70

MODEL TEST POINT 0100 0114 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 132.4 SQ CM (20.52 SQ IN) - MODEL 87.17 M/SEC (266.0 FPS) FREE-JET SPEED

07/19/79 14.683

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X01148

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 64.8 | 68.0 | 68.3 | 68.6 | 69.3 | 70.6 | 70.6 | 71.6 | 79.7 | 85.4 | 87.0 | 85.8 | 78.0 | 161.3 |
| 63 | 66.0 | 68.7 | 69.8 | 70.1 | 70.8 | 71.4 | 72.3 | 72.7 | 81.7 | 85.4 | 87.1 | 85.1 | 78.6 | 161.2 |
| 80 | 67.0 | 69.4 | 70.7 | 71.6 | 72.8 | 73.0 | 73.3 | 75.1 | 83.6 | 86.7 | 86.5 | 83.6 | 73.4 | 161.3 |
| 100 | 69.8 | 72.0 | 72.7 | 73.1 | 73.0 | 74.3 | 74.8 | 76.3 | 85.0 | 86.7 | 84.7 | 80.5 | 71.8 | 160.5 |
| 125 | 70.1 | 70.9 | 72.0 | 73.1 | 74.0 | 75.9 | 76.1 | 77.3 | 85.5 | 87.0 | 85.8 | 78.5 | 69.6 | 161.0 |
| 160 | 71.2 | 71.6 | 74.5 | 74.9 | 75.3 | 76.8 | 76.4 | 78.6 | 85.9 | 86.2 | 85.0 | 76.7 | 69.3 | 160.8 |
| 200 | 69.3 | 73.5 | 74.7 | 75.0 | 75.7 | 77.4 | 77.8 | 79.2 | 86.0 | 86.7 | 84.3 | 76.2 | 68.9 | 161.1 |
| 250 | 71.4 | 72.9 | 74.2 | 74.7 | 75.4 | 76.1 | 77.5 | 79.3 | 85.7 | 86.4 | 83.8 | 75.7 | 68.9 | 161.1 |
| 315 | 70.4 | 72.9 | 74.0 | 74.9 | 76.2 | 76.7 | 78.4 | 79.8 | 85.7 | 85.4 | 83.5 | 76.5 | 68.7 | 161.2 |
| 400 | 70.3 | 73.2 | 74.4 | 75.3 | 76.4 | 77.7 | 78.6 | 80.3 | 85.1 | 84.5 | 82.8 | 75.1 | 67.7 | 161.2 |
| 500 | 70.0 | 73.6 | 74.2 | 74.3 | 75.4 | 77.3 | 78.5 | 80.2 | 84.6 | 84.5 | 82.6 | 75.5 | 68.1 | 161.5 |
| 630 | 70.1 | 73.3 | 74.8 | 74.5 | 76.0 | 78.0 | 78.7 | 80.1 | 84.9 | 84.2 | 82.7 | 75.3 | 68.5 | 162.1 |
| 800 | 70.4 | 73.3 | 74.1 | 74.8 | 76.1 | 78.6 | 78.4 | 80.4 | 84.8 | 83.6 | 82.1 | 74.8 | 67.3 | 162.5 |
| 1000 | 69.8 | 72.8 | 74.2 | 74.6 | 76.3 | 78.3 | 78.9 | 80.3 | 83.7 | 83.3 | 81.1 | 74.8 | 66.6 | 162.7 |
| 1250 | 70.3 | 73.3 | 73.8 | 75.3 | 76.9 | 78.5 | 78.1 | 79.2 | 81.5 | 81.3 | 78.8 | 73.1 | 65.0 | 162.1 |
| 1600 | 68.8 | 72.8 | 74.1 | 74.8 | 76.2 | 77.7 | 76.9 | 77.8 | 79.8 | 80.4 | 76.1 | 70.4 | 62.6 | 162.1 |
| 2000 | 64.3 | 70.5 | 72.6 | 74.9 | 76.8 | 77.3 | 75.4 | 76.5 | 77.9 | 77.1 | 72.5 | 66.1 | 57.5 | 161.8 |
| 2500 | 61.3 | 68.6 | 71.3 | 71.3 | 75.2 | 75.3 | 72.3 | 73.5 | 75.4 | 72.5 | 67.3 | 61.8 | 52.1 | 161.6 |
| 3150 | 52.3 | 62.6 | 65.3 | 66.2 | 70.7 | 70.9 | 68.4 | 67.8 | 69.3 | 67.9 | 60.7 | 51.0 | 38.7 | 160.4 |
| 4000 | 44.1 | 53.2 | 59.3 | 60.7 | 62.2 | 62.9 | 61.5 | 61.4 | 62.2 | 58.3 | 50.6 | 37.8 | 20.8 | 159.8 |
| 5000 | 29.6 | 39.2 | 47.7 | 50.6 | 56.1 | 55.7 | 51.7 | 50.7 | 51.5 | 43.9 | 34.5 | 19.1 | | 159.0 |
| 6300 | 8.1 | 21.1 | 31.1 | 33.4 | 37.8 | 38.4 | 36.6 | 33.1 | 35.3 | 23.0 | 10.8 | | | 157.6 |
| 8000 | | | 0.9 | 7.5 | 11.2 | 12.0 | 12.2 | 6.8 | 7.6 | | | | | 156.0 |
| 10000 | | | | | | | | | | | | | | 154.6 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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|-------|------|------|------|------|------|------|------|------|-------|-------|------|------|------|-------|
| QASPL | 81.8 | 84.7 | 85.9 | 86.6 | 88.2 | 89.3 | 89.5 | 91.0 | 96.5 | 97.3 | 96.2 | 91.7 | 83.3 | 174.7 |
| PWL | 88.4 | 92.5 | 94.5 | 95.6 | 97.7 | 98.4 | 97.5 | 98.7 | 102.3 | 102.4 | 99.7 | 93.2 | 84.7 | |
| PWLT | 88.4 | 92.5 | 95.3 | 95.6 | 99.1 | 99.5 | 98.0 | 98.7 | 102.9 | 102.4 | 99.7 | 93.2 | 84.7 | |

DIAMETER RATIO 8.260 FREQUENCY SHIFT -9

TEST DATE 02-08-78 TAPE NO. N292 IALPHA 5859 TAMB 21.56
 LOCATION C41 ANECH CH AERO. RDG. ADG061 PAMB 29.6610 RELNUM 48.70

MODEL TEST POINT 0114 ACOUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 87.17 M/SEC (286.0 FPS) FREE-JET SPEED

07/19/79 14.003

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400RFMDL X01150
BACKGROUND FJB400-FMDL X01400

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

OASPL

99.8

101.4

102.0

102.0

103.8

105.9

107.1

110.4

115.9

118.2

119.1

115.4

110.4

105.2

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TEST DATE 02-08-78 TAPE NO. N292 ALPHA 3859 TANB 21.56
LOCATION C41 ANECH CH AERO. RDG. ADH060 PA/B 29.6580 RELHUM 48.70

MODEL TEST POINT 0115 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 132.4 SQ CM (20.52 SQ IN) - MODEL 116.43 M/SEC (382.3 FPS) FREE-JET SPEED

123

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB

IDENTIFICATION - J-400RFMDL X01150

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | 85.1 | 87.0 | 86.0 | 85.1 | 84.8 | 84.4 | 84.3 | 85.0 | 92.3 | 97.1 | 100.2 | 103.6 | 102.2 | 136.9 |
| 63 | 85.1 | 87.0 | 86.0 | 85.1 | 86.2 | 85.7 | 85.7 | 85.7 | 95.3 | 102.2 | 105.0 | 106.2 | 103.2 | 140.2 |
| 80 | 86.2 | 88.1 | 87.4 | 85.7 | 86.2 | 87.3 | 86.8 | 87.8 | 96.8 | 103.2 | 106.4 | 106.9 | 101.1 | 141.0 |
| 90 | 87.8 | 88.9 | 87.7 | 85.9 | 87.8 | 88.4 | 88.0 | 89.3 | 99.0 | 103.6 | 106.4 | 105.4 | 99.7 | 140.9 |
| 100 | 89.5 | 89.0 | 88.1 | 88.1 | 89.6 | 89.2 | 89.9 | 91.1 | 101.0 | 104.9 | 106.4 | 103.7 | 100.3 | 141.3 |
| 125 | 91.5 | 91.5 | 90.6 | 88.7 | 89.6 | 90.8 | 91.0 | 92.7 | 102.4 | 105.6 | 104.4 | 101.0 | 99.6 | 140.9 |
| 160 | 92.1 | 91.0 | 91.4 | 90.6 | 91.1 | 92.3 | 92.0 | 94.1 | 103.3 | 105.8 | 105.3 | 99.6 | 98.7 | 141.4 |
| 200 | 92.5 | 92.5 | 93.5 | 91.2 | 92.6 | 93.3 | 93.3 | 95.3 | 104.0 | 105.5 | 104.8 | 99.2 | 99.1 | 141.6 |
| 250 | 92.8 | 94.8 | 94.5 | 92.4 | 92.9 | 94.2 | 93.9 | 96.2 | 104.4 | 105.4 | 103.7 | 98.9 | 98.5 | 141.6 |
| 315 | 94.7 | 93.5 | 93.3 | 92.7 | 92.5 | 94.0 | 94.5 | 96.6 | 103.9 | 106.2 | 103.5 | 98.9 | 99.1 | 141.7 |
| 400 | 94.1 | 94.6 | 94.2 | 92.9 | 94.1 | 95.0 | 96.2 | 97.8 | 105.7 | 105.3 | 103.6 | 100.3 | 99.2 | 142.3 |
| 500 | 94.3 | 95.1 | 94.7 | 93.8 | 94.7 | 96.2 | 96.7 | 98.8 | 105.4 | 105.1 | 103.6 | 99.4 | 98.8 | 142.3 |
| 630 | 94.8 | 95.9 | 94.7 | 94.5 | 95.0 | 96.2 | 97.3 | 99.5 | 105.1 | 105.4 | 103.8 | 99.8 | 99.7 | 142.6 |
| 800 | 95.6 | 95.8 | 96.2 | 94.9 | 95.3 | 97.2 | 97.9 | 100.2 | 105.0 | 105.4 | 103.7 | 101.4 | 102.7 | 143.1 |
| 1000 | 96.6 | 96.5 | 96.5 | 94.8 | 95.9 | 97.8 | 98.7 | 100.5 | 104.8 | 104.6 | 103.9 | 101.8 | 103.0 | 143.4 |
| 1250 | 95.7 | 96.2 | 96.4 | 95.2 | 96.3 | 97.7 | 97.6 | 99.6 | 104.4 | 105.2 | 104.0 | 102.8 | 104.6 | 143.9 |
| 1600 | 95.9 | 97.7 | 95.7 | 95.2 | 96.8 | 98.4 | 97.3 | 99.8 | 103.5 | 105.1 | 102.7 | 102.5 | 104.2 | 143.9 |
| 2000 | 96.3 | 97.5 | 96.6 | 94.5 | 95.8 | 96.9 | 96.1 | 98.8 | 102.5 | 103.7 | 101.6 | 102.3 | 104.1 | 144.1 |
| 2500 | 96.0 | 94.9 | 94.8 | 94.8 | 96.2 | 96.7 | 95.5 | 97.4 | 100.2 | 100.5 | 98.4 | 98.9 | 101.4 | 143.4 |
| 3150 | 93.5 | 93.8 | 93.8 | 93.7 | 95.9 | 96.0 | 93.1 | 95.2 | 96.1 | 94.2 | 92.5 | 93.6 | 98.1 | 142.2 |
| 4000 | 92.4 | 91.3 | 91.2 | 93.0 | 93.0 | 93.1 | 89.7 | 89.0 | 95.4 | 96.0 | 92.7 | 91.7 | 96.4 | 142.7 |
| 5000 | 86.7 | 87.9 | 88.6 | 86.7 | 87.4 | 87.7 | 86.8 | 88.1 | 90.4 | 89.9 | 87.2 | 86.0 | 90.6 | 141.3 |
| 6300 | 81.2 | 83.9 | 84.1 | 86.2 | 85.4 | 81.6 | 82.9 | 86.2 | 82.8 | 85.8 | 81.2 | 80.6 | 84.9 | 140.9 |
| 8000 | 77.9 | 79.5 | 79.0 | 77.7 | 77.7 | 76.2 | 75.6 | 81.5 | 75.8 | 74.6 | 75.3 | 79.6 | 79.6 | 139.5 |
| 10000 | 70.3 | 71.2 | 71.4 | 68.9 | 69.1 | 69.6 | 68.7 | 76.3 | 71.1 | 70.9 | 69.0 | 74.3 | 73.8 | 138.1 |
| 12500 | 60.1 | 61.5 | 62.5 | 61.8 | 63.5 | 62.0 | 62.3 | 66.5 | 61.3 | 61.1 | 59.2 | 64.5 | 63.1 | 135.1 |
| 16000 | 106.7 | 107.5 | 107.0 | 105.9 | 107.1 | 108.1 | 108.0 | 110.0 | 116.0 | 117.4 | 117.0 | 115.3 | 114.5 | 156.0 |

REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

| | |
|------------------------|--------|
| JET VELOCITY (FT/SEC) | 382.00 |
| FREE JET DIAMETER (IN) | 48.00 |

MODEL/FULL SIZE SCALE FACTOR
INPUT 1.000 CALC. 1.000

| TEST DATE | 02-08-78 | TAPE NO. | N292 | ALPHA | SB59 | TAMB | 21.56 |
|-----------|--------------|----------|------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERG. | RDG. | PAMB | 29.6580 | RELHUM | 48.70 |

| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
|--------|------------|----------------|-------------|---------------------------|
| 12.2 M | 0115 | 40.0 FT | 20.72 SQ IN | 118.43 M/SEC (382.0 FPS) |
| 0100 | 0115 | 40.0 FT | 132.4 SQ CM | - MODEL |

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07/19/79 14.083

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400RMODEL X01155

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 55.1 | 58.6 | 69.0 | 67.9 | 68.8 | 70.0 | 69.5 | 70.1 | 78.3 | 83.6 | 85.3 | 83.6 | 74.5 | 159.4 |
| 63 | 66.7 | 69.3 | 69.2 | 68.1 | 70.4 | 71.2 | 70.6 | 71.5 | 80.4 | 84.0 | 85.3 | 82.0 | 73.0 | 159.2 |
| 80 | 68.3 | 69.9 | 70.5 | 70.3 | 76.1 | 71.9 | 71.5 | 73.3 | 82.5 | 85.3 | 85.2 | 80.2 | 73.5 | 159.6 |
| 100 | 69.0 | 71.5 | 72.0 | 70.8 | 72.1 | 73.5 | 73.6 | 74.8 | 83.8 | 85.9 | 83.1 | 77.5 | 72.6 | 159.3 |
| 125 | 70.8 | 71.2 | 72.7 | 72.6 | 73.6 | 74.9 | 74.4 | 76.1 | 84.6 | 86.0 | 83.9 | 75.9 | 71.5 | 159.8 |
| 160 | 71.7 | 72.5 | 74.7 | 73.1 | 75.0 | 76.8 | 75.6 | 77.3 | 85.1 | 83.5 | 83.2 | 75.3 | 71.6 | 159.9 |
| 200 | 71.0 | 74.6 | 75.5 | 74.2 | 75.1 | 76.5 | 76.1 | 78.0 | 85.4 | 85.3 | 81.9 | 74.6 | 70.5 | 159.9 |
| 250 | 72.5 | 73.0 | 74.0 | 74.2 | 74.5 | 76.1 | 75.5 | 78.1 | 84.7 | 85.8 | 81.4 | 74.3 | 70.5 | 160.1 |
| 315 | 71.6 | 73.8 | 74.7 | 74.2 | 75.9 | 76.9 | 77.9 | 79.1 | 86.1 | 84.5 | 81.0 | 75.0 | 69.7 | 160.6 |
| 400 | 71.2 | 73.9 | 74.8 | 74.7 | 76.2 | 77.7 | 78.1 | 79.8 | 85.5 | 83.9 | 80.6 | 73.5 | 68.3 | 160.7 |
| 500 | 71.2 | 74.4 | 74.4 | 75.1 | 76.1 | 77.5 | 78.4 | 80.1 | 84.9 | 83.8 | 80.3 | 73.3 | 68.2 | 161.0 |
| 630 | 71.5 | 73.9 | 75.6 | 75.2 | 76.2 | 78.2 | 78.8 | 80.6 | 84.5 | 83.4 | 79.6 | 74.2 | 70.2 | 161.5 |
| 800 | 72.1 | 74.2 | 75.6 | 74.8 | 76.5 | 78.5 | 79.3 | 80.5 | 83.9 | 82.3 | 79.4 | 73.9 | 69.4 | 161.7 |
| 1000 | 70.7 | 73.5 | 75.3 | 75.1 | 76.8 | 78.4 | 79.0 | 79.5 | 83.4 | 82.6 | 79.0 | 74.3 | 69.8 | 162.2 |
| 1250 | 71.5 | 74.7 | 74.4 | 74.9 | 77.1 | 79.0 | 77.7 | 78.6 | 82.2 | 81.1 | 77.2 | 73.1 | 67.9 | 162.3 |
| 1600 | 70.0 | 73.9 | 74.8 | 73.9 | 75.8 | 77.2 | 76.1 | 78.2 | 80.8 | 80.1 | 75.3 | 71.6 | 65.5 | 162.4 |
| 2000 | 66.3 | 71.9 | 72.8 | 74.0 | 76.1 | 76.8 | 75.4 | 76.6 | 78.1 | 76.3 | 71.1 | 66.5 | 59.8 | 161.7 |
| 2500 | 61.8 | 68.1 | 70.8 | 72.2 | 75.2 | 75.6 | 72.4 | 73.7 | 73.1 | 68.8 | 63.4 | 58.5 | 51.6 | 160.6 |
| 3150 | 55.5 | 64.6 | 66.4 | 68.2 | 70.9 | 71.4 | 67.6 | 66.0 | 70.5 | 68.2 | 60.2 | 51.6 | 41.4 | 161.0 |
| 4000 | 48.0 | 55.4 | 59.9 | 60.4 | 62.4 | 63.1 | 61.8 | 61.7 | 61.7 | 67.4 | 48.5 | 36.9 | 21.2 | 159.6 |
| 5000 | 32.3 | 41.1 | 48.9 | 52.3 | 56.1 | 55.9 | 51.5 | 51.2 | 51.3 | 42.6 | 32.7 | 17.8 | | 159.2 |
| 6300 | 11.7 | 23.6 | 32.5 | 36.5 | 37.6 | 38.4 | 36.1 | 33.1 | 34.5 | 21.4 | 8.3 | | | 157.9 |
| 8000 | | | 2.8 | 9.6 | 10.7 | 12.0 | 11.3 | 6.9 | 7.9 | | | | | 156.4 |
| 10000 | | | | | | | | | | | | | | 154.4 |

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DIAMETER RATIO 8.260 FREQUENCY SHIFT -9

TEST DATE 02-08-78 TAPE NO. N292 IALPHA SB59 TAMB 21.56

LOCATION C41 ANECH CH AERO. RDG. ADH060 PAMB 29.6880 RELHUM 48.70

MODEL TEST POINT 0115 ACQUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 116.43 M/SEC (362.0 FPS)

07/19/79 18.690

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X01160
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. 170. 180. 190. 200. PWL

FREQ

50

63

80

100

125

160

200

250 84.3 86.6 87.6 87.6 88.5 91.1 93.2 95.1 99.6 105.1 109.5 112.5 112.4 145.9
315 85.6 88.2 89.0 89.0 90.6 92.4 93.3 95.5 101.9 107.5 111.9 114.3 113.2 147.7
400 87.2 89.4 89.7 89.0 90.1 92.4 94.1 96.3 103.7 111.5 114.4 115.6 113.5 149.6
500 88.2 90.0 91.5 90.8 91.7 94.3 94.9 97.3 104.8 113.1 116.0 116.2 114.1 150.7
630 38.6 91.6 92.2 91.9 93.0 95.2 96.0 99.4 107.2 112.7 116.6 117.0 114.9 151.3
800 93.1 92.2 93.4 94.0 94.3 96.7 97.3 101.0 109.2 113.5 116.9 117.1 115.5 151.6
1000 97.0 98.0 98.8 96.6 96.7 98.0 99.4 102.1 109.8 113.1 116.2 117.2 115.3 151.7
1250 93.3 96.7 96.9 97.0 98.3 100.7 100.3 103.7 110.1 112.6 115.4 118.0 115.2 152.0
1600 95.4 94.1 95.6 96.1 96.9 99.3 100.7 104.1 110.5 112.4 115.9 116.6 114.1 151.3
2000 96.4 93.2 98.4 97.0 96.5 98.6 100.3 104.0 110.8 113.3 115.2 114.9 111.2 150.8
2500 94.0 96.1 96.9 97.1 97.7 99.5 101.4 104.6 110.0 113.5 116.1 113.3 109.3 150.7
3150 95.5 97.6 96.6 97.1 97.5 100.1 101.2 105.6 110.5 112.8 115.2 112.1 109.1 150.2
4000 95.6 97.2 97.4 96.4 97.2 99.4 101.0 105.2 110.1 112.1 114.0 111.1 108.4 149.5
5000 94.9 97.7 97.5 97.5 97.6 99.9 101.6 105.0 108.9 111.7 112.8 110.5 108.2 149.0
6300 93.1 96.5 97.7 97.2 98.5 100.4 101.3 104.7 109.1 110.9 111.2 110.0 107.9 148.6
8000 92.2 96.8 97.2 97.3 98.6 100.0 100.6 103.4 107.4 109.5 110.0 108.5 106.8 147.7
10000 90.3 95.2 96.8 96.9 99.1 100.7 100.1 103.4 106.7 108.4 108.4 107.7 105.4 147.4
12500 87.6 93.0 94.1 95.5 97.8 99.4 98.6 101.5 104.1 105.6 106.1 103.4 104.2 146.0
16000 85.4 90.8 93.1 94.2 96.9 98.9 97.4 100.5 102.4 104.4 104.0 103.8 102.5 145.9
20000 80.1 87.9 89.4 91.5 95.6 96.9 94.3 97.1 99.2 100.7 100.4 100.7 99.5 144.6
25000 78.6 83.4 86.7 87.3 93.2 93.8 90.9 92.4 96.7 96.0 96.6 96.1 97.5 143.4
31500 76.9 79.7 83.9 86.1 87.1 88.2 87.3 89.1 92.5 95.0 93.6 90.6 91.2 142.8
40000 71.4 74.4 77.8 80.1 84.6 86.1 81.9 83.9 87.1 88.7 85.0 85.9 87.4 142.0
50000 64.0 67.7 70.4 73.4 75.9 77.4 76.8 76.8 83.0 82.2 83.8 80.8 80.7 140.3
63000 58.4 61.4 64.3 67.2 67.9 69.3 70.6 70.1 79.2 75.9 77.2 75.5 76.9 139.9
80000 52.0 55.0 58.2 61.2 61.5 63.6 63.1 64.6 72.4 69.9 73.1 68.4 68.6 140.7

QASPL 105.9 108.2 108.7 108.5 109.7 111.6 112.2 115.6 121.1 124.3 127.0 127.1 124.9 162.9

TEST DATE 02-07-78 TAPE NO. N291 ALPHA SB59 TAMB 18.68
LOCATION C41 ANECH CH AERG. RDG. ADH044 PANE 29.6949 RELHUM 43.20

MODEL TEST POINT 0116 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 132.4 SQ CM (20.52 SQ IN) - MODEL 0. FREE-JET SPEED 0. M/SEC (0. FPS)

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07/19/79 18.690

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X01160

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PML

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | 84.3 | 88.8 | 87.8 | 87.6 | 88.5 | 91.1 | 93.2 | 95.1 | 99.8 | 105.1 | 109.5 | 112.5 | 112.4 | 145.9 |
| 63 | 85.6 | 88.2 | 88.9 | 89.0 | 90.6 | 92.4 | 93.3 | 95.5 | 101.9 | 107.6 | 111.9 | 114.3 | 113.2 | 147.7 |
| 80 | 87.2 | 89.4 | 89.7 | 89.0 | 90.1 | 93.2 | 94.1 | 96.3 | 103.7 | 111.5 | 114.4 | 116.6 | 113.5 | 149.6 |
| 100 | 88.2 | 90.0 | 91.5 | 90.8 | 91.7 | 94.3 | 94.9 | 97.3 | 104.8 | 113.1 | 116.0 | 118.2 | 114.1 | 150.7 |
| 125 | 88.8 | 91.6 | 92.2 | 91.9 | 93.0 | 95.2 | 95.0 | 99.4 | 109.2 | 112.7 | 116.6 | 117.0 | 114.9 | 151.3 |
| 160 | 93.1 | 92.2 | 93.4 | 94.0 | 94.3 | 96.7 | 97.3 | 101.0 | 109.2 | 113.5 | 116.9 | 117.1 | 115.5 | 151.8 |
| 200 | 97.0 | 98.0 | 98.8 | 96.6 | 96.7 | 98.9 | 99.4 | 102.1 | 109.8 | 113.1 | 116.2 | 117.2 | 115.3 | 151.7 |
| 250 | 93.3 | 96.7 | 96.9 | 97.0 | 98.3 | 100.7 | 100.3 | 103.7 | 110.1 | 112.8 | 116.4 | 118.0 | 115.2 | 152.0 |
| 315 | 95.4 | 94.1 | 95.6 | 96.1 | 95.9 | 99.3 | 100.7 | 104.1 | 110.5 | 112.4 | 115.9 | 116.6 | 114.1 | 151.3 |
| 400 | 95.4 | 99.2 | 98.4 | 97.0 | 96.5 | 98.6 | 100.3 | 104.0 | 110.8 | 113.3 | 115.2 | 114.9 | 111.2 | 150.8 |
| 500 | 94.0 | 96.1 | 96.9 | 97.1 | 97.7 | 99.5 | 101.4 | 104.6 | 110.0 | 113.8 | 116.1 | 113.3 | 109.3 | 150.7 |
| 630 | 95.5 | 97.6 | 96.6 | 97.1 | 97.5 | 100.1 | 101.2 | 105.6 | 110.5 | 112.8 | 115.2 | 112.1 | 109.1 | 150.2 |
| 800 | 95.6 | 97.2 | 97.4 | 96.4 | 97.2 | 99.4 | 101.0 | 105.2 | 110.1 | 112.1 | 114.0 | 111.1 | 108.4 | 149.5 |
| 1000 | 94.9 | 97.7 | 97.5 | 97.5 | 97.6 | 99.9 | 101.6 | 105.0 | 108.9 | 111.7 | 112.8 | 110.5 | 108.2 | 149.0 |
| 1250 | 93.1 | 96.5 | 97.2 | 97.2 | 98.5 | 100.4 | 101.3 | 104.7 | 109.1 | 110.9 | 111.2 | 110.0 | 107.9 | 148.6 |
| 1600 | 92.2 | 96.8 | 97.2 | 97.3 | 98.6 | 100.0 | 100.6 | 103.4 | 107.4 | 109.5 | 110.0 | 108.5 | 106.8 | 147.7 |
| 2000 | 90.3 | 95.2 | 96.8 | 96.9 | 99.1 | 100.7 | 100.1 | 103.4 | 106.7 | 108.4 | 108.4 | 107.7 | 105.4 | 147.4 |
| 2500 | 87.6 | 93.0 | 94.1 | 95.5 | 97.8 | 99.4 | 98.6 | 101.5 | 104.1 | 105.6 | 106.1 | 105.4 | 104.2 | 146.0 |
| 3150 | 85.4 | 90.8 | 93.1 | 94.2 | 96.9 | 98.9 | 97.4 | 100.5 | 102.4 | 104.4 | 104.0 | 103.8 | 102.5 | 145.9 |
| 4000 | 80.1 | 87.9 | 89.4 | 91.5 | 95.6 | 96.9 | 94.3 | 97.1 | 99.2 | 100.7 | 100.4 | 100.7 | 99.5 | 144.6 |
| 5000 | 78.6 | 83.4 | 86.7 | 87.3 | 93.2 | 93.8 | 90.9 | 92.4 | 96.7 | 96.0 | 96.6 | 95.1 | 97.5 | 143.4 |
| 6300 | 76.9 | 79.7 | 83.9 | 86.1 | 87.1 | 88.2 | 87.3 | 89.1 | 92.5 | 95.0 | 93.6 | 90.6 | 91.2 | 142.8 |
| 8000 | 71.4 | 74.4 | 77.8 | 80.1 | 84.6 | 86.1 | 81.9 | 83.9 | 87.1 | 88.7 | 89.0 | 85.9 | 87.4 | 142.0 |
| 10000 | 64.0 | 67.7 | 70.4 | 73.4 | 75.9 | 77.4 | 76.8 | 76.8 | 83.0 | 82.2 | 83.8 | 80.8 | 80.7 | 140.3 |
| 12500 | 58.4 | 61.4 | 64.3 | 67.2 | 67.9 | 69.3 | 70.6 | 70.1 | 79.2 | 75.9 | 77.2 | 75.5 | 75.9 | 139.9 |
| 16000 | 52.0 | 55.0 | 58.2 | 61.2 | 61.5 | 63.6 | 63.1 | 64.6 | 72.4 | 69.9 | 73.1 | 68.4 | 68.6 | 140.7 |
| 20000 | 105.9 | 108.2 | 108.7 | 108.5 | 109.7 | 111.6 | 112.2 | 115.6 | 121.1 | 124.3 | 127.0 | 127.1 | 124.9 | 162.9 |

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 40.00 TURBULANCE CORRECTION - YES

TEST DATE 02-07-78 TAPE NO. N291 ALPHA 3859 TAPB 18.68
LOCATION C41 ANECH CH AERO. RDG. ADH044 PAMB 29.6949 RELHUM 43.20

MODEL TEST POINT 0100 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 132.4 SQ CH (20.52 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0, FPS)

07/19/79 18.690

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X01165

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 66.1 | 69.9 | 71.2 | 71.2 | 72.7 | 76.0 | 76.7 | 78.5 | 85.2 | 92.0 | 93.3 | 92.3 | 86.9 | 167.9 |
| 63 | 67.1 | 70.4 | 73.0 | 74.3 | 77.0 | 77.5 | 79.5 | 86.3 | 93.5 | 94.9 | 92.8 | 87.4 | 169.1 | |
| 80 | 67.7 | 72.0 | 73.6 | 74.1 | 75.6 | 77.9 | 78.6 | 81.6 | 88.5 | 93.1 | 95.4 | 93.6 | 88.1 | 169.7 |
| 100 | 71.9 | 72.5 | 74.8 | 76.1 | 76.8 | 79.3 | 79.8 | 83.1 | 90.6 | 93.8 | 95.6 | 93.6 | 88.5 | 170.2 |
| 125 | 75.6 | 78.2 | 80.1 | 78.6 | 79.1 | 80.8 | 81.9 | 84.1 | 91.1 | 93.3 | 94.9 | 93.6 | 88.1 | 170.1 |
| 160 | 71.8 | 76.7 | 78.1 | 78.9 | 80.6 | 83.1 | 82.6 | 85.6 | 91.2 | 92.8 | 94.8 | 94.1 | 87.6 | 170.4 |
| 200 | 73.6 | 73.9 | 76.6 | 77.9 | 79.1 | 81.6 | 82.9 | 85.9 | 91.5 | 92.3 | 94.1 | 92.4 | 86.1 | 169.7 |
| 250 | 74.2 | 78.7 | 79.2 | 78.5 | 78.5 | 80.8 | 82.3 | 85.5 | 91.6 | 92.9 | 93.1 | 90.3 | 82.5 | 169.1 |
| 315 | 71.5 | 75.3 | 77.3 | 78.4 | 79.4 | 81.4 | 83.2 | 85.9 | 90.5 | 92.7 | 93.6 | 88.1 | 79.8 | 169.0 |
| 400 | 72.5 | 76.4 | 76.7 | 78.1 | 78.9 | 81.6 | 82.6 | 86.6 | 90.6 | 91.6 | 92.1 | 86.2 | 78.6 | 168.5 |
| 500 | 72.1 | 75.6 | 77.2 | 77.1 | 78.4 | 80.7 | 82.1 | 85.8 | 89.9 | 90.5 | 90.4 | 84.6 | 76.9 | 167.8 |
| 630 | 70.9 | 75.8 | 77.0 | 77.9 | 78.4 | 81.0 | 82.4 | 85.4 | 88.4 | 89.7 | 88.8 | 83.3 | 75.7 | 167.3 |
| 800 | 68.6 | 74.1 | 76.9 | 77.3 | 79.1 | 81.1 | 81.9 | 84.8 | 88.3 | 88.5 | 86.6 | 82.1 | 74.3 | 166.9 |
| 1000 | 67.3 | 74.2 | 76.1 | 77.2 | 79.1 | 80.7 | 81.1 | 83.3 | 86.3 | 86.8 | 85.1 | 79.9 | 72.0 | 166.0 |
| 1250 | 64.9 | 72.2 | 75.5 | 76.7 | 79.4 | 81.2 | 80.4 | 83.1 | 85.4 | 85.5 | 82.9 | 78.4 | 69.1 | 165.8 |
| 1600 | 61.3 | 69.4 | 72.4 | 74.9 | 77.8 | 79.7 | 78.7 | 80.9 | 82.4 | 82.0 | 79.8 | 74.7 | 65.5 | 164.4 |
| 2000 | 58.1 | 66.7 | 71.0 | 73.4 | 76.8 | 79.1 | 77.3 | 79.7 | 80.3 | 80.2 | 76.7 | 71.5 | 60.9 | 164.3 |
| 2500 | 51.0 | 62.5 | 66.4 | 70.0 | 74.9 | 76.5 | 73.7 | 75.6 | 76.2 | 75.3 | 71.3 | 65.5 | 52.9 | 162.9 |
| 3150 | 46.2 | 55.6 | 61.8 | 64.3 | 71.1 | 72.1 | 68.8 | 69.3 | 71.8 | 68.2 | 64.1 | 55.9 | 42.5 | 161.7 |
| 4000 | 38.2 | 47.1 | 55.2 | 59.8 | 62.1 | 63.6 | 62.3 | 62.8 | 63.8 | 62.4 | 64.9 | 41.6 | 21.8 | 161.2 |
| 5000 | 22.9 | 34.3 | 42.9 | 48.3 | 54.6 | 56.6 | 51.9 | 52.1 | 52.2 | 48.6 | 40.5 | 23.1 | | 160.3 |
| 6300 | | 13.4 | 23.4 | 30.9 | 35.8 | 38.1 | 36.7 | 34.2 | 36.0 | 27.8 | 17.5 | | | 158.6 |
| 8000 | | | | 5.5 | 9.6 | 12.2 | 12.3 | 8.4 | 10.9 | | | | | 158.3 |
| 10000 | | | | | | | | | | | | | | 159.0 |

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| | | | | | | | | | | | | | | |
|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| OSPL | 83.2 | 87.0 | 88.7 | 89.3 | 90.8 | 92.9 | 93.5 | 96.5 | 101.4 | 103.6 | 104.8 | 102.5 | 96.6 | 181.0 |
| PWL | 87.1 | 92.1 | 94.6 | 96.2 | 98.9 | 101.0 | 100.4 | 102.9 | 106.6 | 107.7 | 107.7 | 104.1 | 97.1 | |
| PNLT | 87.7 | 92.8 | 95.2 | 96.2 | 100.2 | 102.3 | 100.9 | 102.9 | 106.6 | 107.7 | 107.7 | 104.1 | 98.2 | |

DIAMETER RATIO 8.260 FREQUENCY SHIFT -9

| | | | | | | | |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| TEST DATE | 02-07-78 | TAPE NO. | N291 | ALPHA | SB59 | TAMB | 18.68 |
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH044 | PAMB | 29.6949 | RELHUM | 43.20 |

| | | | | |
|-------|------------|-------------------------|-------------------------------------|--------------------|
| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
| 0100 | 0116 | 731.5 M (2400.0 FT) SL | 9032.2 SQ CM (1400.00 SQ IN) - FULL | 0. M/SEC (0. FPS) |

07/19/79 18.690

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X01170
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250 83.3 87.8 86.8 67.4 86.0 90.3 92.7 94.4 99.3 104.7 108.6 110.7 111.4 144.7
315 84.6 86.9 88.2 88.0 89.6 92.2 92.8 94.7 101.4 107.0 110.6 112.8 112.0 146.6
400 86.2 88.4 89.0 88.5 90.3 92.5 93.6 95.8 103.2 110.5 112.9 114.1 112.3 148.3
500 87.2 89.3 90.8 90.1 91.4 93.8 94.4 97.1 104.6 112.1 114.5 114.9 112.8 149.5
630 88.6 90.9 91.4 91.2 96.3 95.2 96.0 99.2 106.2 111.7 116.1 115.8 114.2 150.6
800 92.6 91.2 92.4 93.0 93.8 95.9 97.1 100.7 107.7 112.8 115.9 116.6 114.2 151.0
1000 95.7 96.8 97.3 95.8 94.9 97.3 98.7 101.6 108.8 112.4 114.5 116.2 113.8 150.5
1250 92.6 95.9 96.2 96.0 97.3 99.4 99.4 99.3 102.5 108.8 111.8 115.1 116.0 113.2 150.5
1600 94.7 94.1 94.6 94.9 96.2 98.6 99.9 103.1 109.2 111.7 114.6 115.3 112.6 150.2
2000 95.4 97.4 96.9 95.4 96.0 98.1 99.3 103.4 109.6 112.0 113.5 114.2 110.2 149.6
2500 93.8 95.1 96.1 96.1 96.9 98.5 100.7 103.8 109.2 111.7 113.6 112.6 108.6 149.1
3150 94.8 96.8 96.1 96.1 96.4 98.8 100.4 103.8 110.0 111.2 113.4 110.8 107.8 148.8
4000 94.8 95.8 95.4 95.1 96.2 98.8 100.2 103.6 108.8 110.0 112.4 110.1 107.1 148.0
5000 93.6 94.9 95.7 95.7 96.8 98.6 100.2 103.9 108.3 110.1 111.2 109.4 106.1 147.6
6300 92.0 94.6 95.6 95.1 96.7 99.3 100.2 103.1 107.8 109.0 109.8 108.6 105.8 147.0
8000 91.6 95.0 95.3 95.7 96.5 98.7 99.7 102.6 106.5 107.6 108.4 107.6 105.2 146.3
10000 89.2 94.0 95.4 95.8 96.9 99.6 99.6 98.7 102.0 105.1 107.1 107.8 106.9 104.0 146.2
12500 86.8 91.8 93.2 94.6 96.4 97.8 97.5 100.9 103.0 104.2 105.2 104.3 101.3 144.8
16000 84.3 89.9 92.0 93.1 95.3 97.6 95.8 99.1 100.8 103.0 103.1 102.2 100.4 144.5
20000 78.7 87.0 88.5 90.4 94.0 96.1 93.5 96.0 97.8 99.3 99.3 99.6 97.6 143.3
25000 77.5 82.5 85.3 86.4 91.3 92.5 89.8 90.7 95.1 94.3 95.5 95.7 95.8 142.0
31500 75.3 79.0 82.5 84.5 85.8 86.6 86.0 87.7 91.3 92.8 92.7 90.8 89.4 141.5
40000 69.8 73.2 77.2 79.2 84.0 84.7 80.3 82.5 86.0 87.0 87.1 85.3 85.2 140.6
50000 62.6 66.5 69.8 72.0 75.2 76.8 75.2 75.4 81.3 80.2 81.6 80.7 79.1 138.8
63000 57.0 60.5 63.2 65.6 67.0 68.4 69.4 69.0 77.3 74.0 75.8 74.9 73.7 138.4
80000 50.6 54.6 57.3 60.3 62.7 61.5 63.4 71.0 68.4 70.7 67.5 66.7 139.1

QASPL 105.0 106.9 107.4 107.3 108.6 110.6 111.3 114.6 120.0 123.1 125.6 125.9 123.6 161.6

TEST DATE 02-07-78 TAPE NO. N291 IALPHA SB59 TAMB 14.90
LOCATION C41 ANECH CH AERO. RDG. ADH049 PAMB 29.6979 RELHUM 45.50

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 132.4 SQ CM (20.52 SQ IN) - MODEL 0. M/SEC (0. FPS)
0100 0117

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07/19/79 18.690

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X01170

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 83.3 | 87.8 | 86.8 | 87.4 | 88.0 | 90.3 | 92.7 | 94.4 | 99.3 | 104.7 | 108.5 | 110.7 | 111.4 | 144.7 |
| 315 | 84.6 | 86.9 | 86.2 | 88.0 | 89.6 | 92.2 | 92.8 | 94.7 | 101.4 | 107.0 | 110.6 | 112.6 | 112.0 | 146.5 |
| 400 | 86.2 | 88.4 | 89.0 | 88.3 | 90.3 | 92.5 | 93.6 | 95.8 | 103.2 | 110.5 | 112.9 | 114.1 | 112.3 | 148.3 |
| 500 | 87.2 | 89.3 | 90.8 | 90.1 | 91.4 | 93.8 | 94.4 | 97.1 | 104.6 | 112.1 | 114.5 | 114.9 | 112.8 | 149.5 |
| 630 | 88.6 | 90.9 | 91.4 | 91.2 | 96.3 | 95.2 | 96.0 | 99.2 | 106.2 | 111.7 | 116.1 | 115.8 | 114.2 | 150.5 |
| 800 | 92.6 | 91.2 | 92.4 | 93.0 | 93.8 | 95.9 | 97.1 | 100.7 | 107.7 | 112.8 | 115.9 | 116.6 | 114.2 | 151.0 |
| 1000 | 95.7 | 96.8 | 97.3 | 95.8 | 94.8 | 97.3 | 98.7 | 101.6 | 108.8 | 112.4 | 114.5 | 116.2 | 113.8 | 150.5 |
| 1250 | 92.6 | 95.9 | 96.2 | 96.0 | 97.3 | 99.4 | 99.3 | 102.5 | 108.8 | 111.8 | 115.1 | 116.0 | 113.2 | 150.5 |
| 1600 | 94.7 | 94.1 | 94.6 | 94.9 | 96.2 | 98.6 | 99.9 | 103.1 | 109.2 | 111.7 | 114.6 | 115.3 | 112.6 | 150.2 |
| 2000 | 95.4 | 97.4 | 96.9 | 95.4 | 96.0 | 98.1 | 99.3 | 103.4 | 109.6 | 112.0 | 113.5 | 114.2 | 110.2 | 149.6 |
| 2500 | 93.8 | 95.1 | 96.1 | 96.1 | 96.9 | 98.5 | 100.7 | 103.8 | 109.2 | 111.7 | 113.6 | 112.6 | 108.6 | 149.1 |
| 3150 | 94.8 | 96.8 | 96.1 | 96.1 | 96.4 | 98.8 | 100.4 | 103.8 | 110.0 | 111.2 | 113.4 | 110.8 | 107.8 | 148.8 |
| 4000 | 94.8 | 95.8 | 95.4 | 95.1 | 96.2 | 98.8 | 100.2 | 103.6 | 108.8 | 110.0 | 112.4 | 110.1 | 107.1 | 148.0 |
| 5000 | 93.6 | 94.9 | 95.7 | 95.7 | 96.5 | 98.6 | 100.2 | 103.9 | 108.3 | 110.1 | 111.2 | 109.4 | 106.1 | 147.6 |
| 6300 | 92.0 | 94.6 | 95.6 | 95.1 | 96.7 | 99.3 | 100.2 | 103.1 | 107.8 | 109.0 | 109.8 | 108.6 | 105.8 | 147.0 |
| 8000 | 91.6 | 95.0 | 95.3 | 95.7 | 96.5 | 98.7 | 99.7 | 102.6 | 106.5 | 107.6 | 108.4 | 107.6 | 105.2 | 146.3 |
| 10000 | 89.2 | 94.0 | 95.4 | 95.8 | 96.9 | 99.6 | 99.6 | 102.0 | 105.1 | 107.1 | 107.8 | 106.9 | 104.0 | 146.2 |
| 12500 | 86.8 | 91.8 | 93.2 | 94.6 | 96.4 | 97.8 | 97.5 | 100.9 | 103.0 | 104.2 | 105.2 | 104.3 | 101.3 | 144.8 |
| 16000 | 84.3 | 89.9 | 92.0 | 93.1 | 95.3 | 97.6 | 95.8 | 99.1 | 100.8 | 103.0 | 103.1 | 102.2 | 100.4 | 144.5 |
| 20000 | 78.7 | 87.0 | 88.5 | 90.4 | 94.0 | 96.1 | 93.5 | 95.0 | 97.8 | 99.3 | 99.3 | 98.6 | 97.6 | 143.3 |
| 25000 | 77.5 | 82.5 | 85.3 | 86.4 | 91.3 | 92.5 | 89.8 | 90.7 | 95.1 | 94.3 | 95.5 | 95.7 | 95.8 | 142.0 |
| 31500 | 75.3 | 79.0 | 82.5 | 84.5 | 85.8 | 86.6 | 86.0 | 87.7 | 91.3 | 92.8 | 92.7 | 90.8 | 89.4 | 141.5 |
| 40000 | 69.8 | 73.2 | 77.2 | 79.2 | 84.0 | 84.7 | 80.3 | 82.5 | 86.0 | 87.0 | 87.1 | 85.3 | 85.2 | 140.6 |
| 50000 | 62.6 | 66.5 | 69.8 | 72.0 | 75.2 | 76.8 | 75.2 | 75.4 | 81.3 | 80.2 | 81.6 | 80.7 | 79.1 | 138.8 |
| 63000 | 57.0 | 60.5 | 63.2 | 65.6 | 67.0 | 68.4 | 69.4 | 69.0 | 77.3 | 74.0 | 75.8 | 74.9 | 73.7 | 138.4 |
| 80000 | 50.6 | 54.6 | 57.3 | 60.3 | 60.3 | 62.7 | 61.5 | 63.4 | 71.0 | 68.4 | 70.7 | 67.5 | 66.7 | 139.1 |
| GASPL | 105.0 | 106.9 | 107.4 | 107.3 | 108.6 | 110.6 | 111.3 | 114.6 | 120.0 | 123.1 | 125.6 | 125.9 | 123.6 | 161.6 |

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MODEL/FULL SIZE SCALE FACTOR
 INPUT 1.000 CALC. 1.000

FREE JET VELOCITY (FT/SEC)
 FREE JET DIAMETER (IN) 0. 48.00

REFRACTION CORRECTION - YES
 TURBULANCE CORRECTION - YES

TEST DATE 02-07-78 TAPE NO. N291 IALPHA SB59 TAMB 14.90
 LOCATION C41 ANECH CH AERO. RDG. ADH049 FAMB 29.6979 RELHUM 45.50

MODEL TEST POINT 0100 0117 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 132.4 SQ CM (20.52 SQ IN) - MODEL 0. M/SEC (0. FPS)
 FREE-JET SPEED

07/19/79 18.690

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 35 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X01175

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 65.1 | 68.9 | 70.5 | 70.7 | 73.0 | 75.2 | 76.2 | 78.0 | 84.7 | 91.0 | 91.8 | 90.8 | 85.6 | 166.8 |
| 63 | 66.1 | 69.7 | 72.3 | 72.3 | 74.0 | 76.5 | 77.0 | 79.3 | 86.0 | 92.5 | 93.4 | 91.6 | 86.1 | 167.3 |
| 80 | 67.4 | 71.3 | 72.9 | 73.4 | 78.9 | 77.9 | 78.6 | 81.4 | 87.6 | 92.1 | 94.9 | 92.4 | 87.4 | 168.9 |
| 100 | 71.4 | 71.5 | 73.8 | 75.1 | 76.4 | 78.5 | 79.6 | 82.8 | 89.1 | 93.1 | 94.6 | 93.1 | 87.3 | 169.3 |
| 125 | 74.4 | 77.0 | 78.6 | 77.9 | 77.4 | 79.9 | 81.1 | 83.6 | 90.1 | 92.6 | 93.1 | 92.5 | 86.7 | 168.9 |
| 160 | 71.0 | 76.0 | 77.3 | 77.9 | 79.6 | 81.9 | 81.6 | 84.4 | 90.0 | 91.8 | 93.6 | 92.1 | 85.6 | 168.9 |
| 200 | 72.9 | 73.9 | 75.6 | 76.6 | 78.4 | 80.9 | 82.1 | 84.9 | 90.2 | 91.5 | 92.8 | 91.1 | 84.6 | 168.5 |
| 250 | 73.2 | 77.0 | 77.7 | 77.0 | 78.0 | 80.3 | 81.3 | 85.0 | 90.3 | 91.6 | 91.3 | 89.5 | 91.5 | 167.9 |
| 315 | 71.2 | 74.3 | 76.5 | 77.3 | 78.6 | 80.4 | 82.4 | 85.1 | 89.7 | 90.9 | 91.1 | 87.4 | 79.1 | 167.5 |
| 400 | 71.7 | 75.6 | 76.2 | 77.0 | 77.8 | 80.3 | 81.8 | 84.8 | 90.1 | 90.0 | 90.3 | 84.9 | 77.3 | 167.2 |
| 500 | 71.2 | 74.3 | 75.1 | 75.8 | 77.3 | 80.1 | 81.3 | 84.3 | 88.5 | 88.4 | 88.9 | 83.6 | 75.6 | 166.3 |
| 630 | 69.6 | 73.0 | 75.1 | 76.0 | 77.6 | 79.6 | 81.1 | 84.3 | 87.8 | 88.1 | 87.2 | 82.2 | 73.6 | 166.0 |
| 800 | 67.5 | 72.3 | 74.8 | 75.2 | 77.3 | 80.1 | 80.8 | 83.2 | 86.9 | 86.7 | 85.3 | 80.7 | 72.2 | 165.4 |
| 1000 | 66.7 | 72.3 | 74.2 | 75.6 | 77.0 | 79.4 | 80.2 | 82.8 | 85.4 | 85.0 | 83.5 | 79.1 | 70.4 | 164.7 |
| 1250 | 63.8 | 71.1 | 74.1 | 75.6 | 77.3 | 80.1 | 79.1 | 81.8 | 83.8 | 84.1 | 82.3 | 77.5 | 67.8 | 164.6 |
| 1500 | 60.4 | 68.3 | 71.5 | 74.0 | 76.5 | 78.1 | 77.6 | 80.3 | 81.2 | 80.6 | 78.9 | 73.6 | 62.7 | 163.2 |
| 2000 | 56.9 | 65.8 | 69.9 | 72.3 | 75.2 | 77.7 | 75.7 | 78.3 | 78.6 | 78.8 | 75.8 | 69.9 | 58.8 | 162.9 |
| 2500 | 49.6 | 61.6 | 65.5 | 68.9 | 73.3 | 75.7 | 72.8 | 74.5 | 74.8 | 73.9 | 70.2 | 64.4 | 51.1 | 161.7 |
| 3150 | 45.1 | 54.7 | 60.4 | 63.4 | 69.3 | 70.7 | 67.7 | 67.7 | 70.2 | 66.5 | 63.0 | 55.6 | 40.9 | 160.3 |
| 4000 | 36.6 | 46.5 | 53.8 | 58.1 | 60.7 | 61.9 | 60.9 | 61.4 | 62.6 | 60.2 | 54.0 | 41.7 | 19.9 | 159.8 |
| 5000 | 21.3 | 33.1 | 42.3 | 47.5 | 54.0 | 55.2 | 50.3 | 50.8 | 51.0 | 43.9 | 38.6 | 22.5 | | 159.0 |
| 6300 | | 12.2 | 22.8 | 29.5 | 35.1 | 37.4 | 35.1 | 32.8 | 34.3 | 25.9 | 15.4 | | | 157.1 |
| 8000 | | | | 3.8 | 8.7 | 11.3 | 11.2 | 7.2 | 9.0 | | | | | 156.7 |
| 10000 | | | | | | | | | | | | | | 157.4 |

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QASPL 82.4 85.8 87.5 88.1 89.8 92.0 92.7 95.4 100.3 102.5 103.4 101.3 95.2 179.7
 PNLT 86.2 90.9 93.3 95.0 97.6 99.9 99.2 101.7 105.6 106.3 106.1 103.0 95.6
 PNLT 86.7 91.5 93.9 95.0 98.9 101.1 99.2 101.7 105.6 106.3 106.1 103.0 96.8

DIAMETER RATIO 8.260 FREQUENCY SHIFT -9

TEST DATE 02-07-78 TAPE NO. N291 ALPHA 5859 TAMB 14.90
 LOCATION C41 ANECH CH AERO. RDG. ADH049 PAMB 29.6979 RELHUM 45.50

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
 0100 0117 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. F/S)

07/19/79 18.690

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X01180

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 83.3 | 88.3 | 87.6 | 87.6 | 88.5 | 90.6 | 93.0 | 94.9 | 99.6 | 104.9 | 109.0 | 111.5 | 111.4 | 145.1 |
| 315 | 85.1 | 87.7 | 88.2 | 88.2 | 90.1 | 91.9 | 92.3 | 95.0 | 101.7 | 107.0 | 110.9 | 113.1 | 112.0 | 146.8 |
| 400 | 86.9 | 88.9 | 89.7 | 88.8 | 90.3 | 93.0 | 93.8 | 96.3 | 103.7 | 110.6 | 113.4 | 114.6 | 112.5 | 148.7 |
| 500 | 88.0 | 90.3 | 91.8 | 90.8 | 91.9 | 94.3 | 94.9 | 97.3 | 104.6 | 112.4 | 114.8 | 115.4 | 113.1 | 149.8 |
| 630 | 88.6 | 91.1 | 91.9 | 92.2 | 96.0 | 95.7 | 96.3 | 99.7 | 106.4 | 112.7 | 115.9 | 116.3 | 114.2 | 150.8 |
| 800 | 92.9 | 92.2 | 92.9 | 93.7 | 94.6 | 96.2 | 97.6 | 101.2 | 108.2 | 112.8 | 116.4 | 117.1 | 115.0 | 151.4 |
| 1000 | 96.0 | 96.3 | 97.6 | 96.3 | 95.9 | 98.0 | 98.7 | 102.1 | 109.8 | 112.4 | 115.8 | 116.4 | 114.6 | 151.1 |
| 1250 | 93.1 | 96.4 | 97.2 | 96.7 | 97.5 | 99.4 | 99.8 | 103.2 | 109.8 | 112.3 | 115.4 | 116.8 | 114.2 | 151.1 |
| 1600 | 94.9 | 94.3 | 95.1 | 95.6 | 96.7 | 99.3 | 100.7 | 103.9 | 110.2 | 112.2 | 115.1 | 115.8 | 113.8 | 150.8 |
| 2000 | 96.1 | 98.2 | 97.4 | 96.2 | 96.8 | 98.6 | 100.3 | 103.4 | 110.6 | 112.0 | 114.5 | 114.9 | 111.4 | 150.3 |
| 2500 | 94.3 | 95.3 | 96.1 | 96.3 | 97.4 | 99.3 | 101.2 | 104.1 | 110.2 | 112.4 | 114.9 | 113.8 | 109.8 | 150.1 |
| 3150 | 94.5 | 97.3 | 96.8 | 96.6 | 97.2 | 100.0 | 101.2 | 104.6 | 110.2 | 111.0 | 114.4 | 112.8 | 108.6 | 149.6 |
| 4000 | 94.8 | 95.9 | 96.1 | 96.1 | 96.7 | 98.8 | 100.9 | 104.1 | 109.5 | 110.8 | 113.2 | 111.3 | 107.8 | 148.8 |
| 5000 | 93.9 | 96.4 | 96.7 | 96.4 | 97.5 | 99.1 | 101.3 | 104.9 | 109.1 | 110.6 | 112.0 | 109.9 | 107.4 | 148.4 |
| 6300 | 92.6 | 95.9 | 96.7 | 96.2 | 97.4 | 100.0 | 100.7 | 103.9 | 108.8 | 110.0 | 110.6 | 109.2 | 107.1 | 147.9 |
| 8000 | 91.6 | 96.2 | 96.4 | 96.2 | 97.6 | 99.5 | 100.3 | 103.3 | 107.8 | 108.6 | 109.4 | 107.9 | 106.7 | 147.3 |
| 10000 | 90.0 | 95.0 | 96.0 | 96.1 | 98.0 | 100.1 | 99.5 | 103.0 | 106.6 | 107.8 | 108.0 | 106.9 | 104.8 | 146.9 |
| 12500 | 86.8 | 92.8 | 94.0 | 95.1 | 96.7 | 98.9 | 98.3 | 101.4 | 103.8 | 105.5 | 105.7 | 104.6 | 102.8 | 145.6 |
| 16000 | 84.5 | 90.5 | 92.8 | 94.1 | 96.3 | 98.1 | 97.0 | 99.6 | 102.0 | 104.0 | 103.4 | 103.0 | 102.0 | 145.4 |
| 20000 | 79.7 | 87.3 | 89.0 | 90.9 | 95.2 | 97.1 | 94.0 | 96.8 | 99.3 | 99.8 | 99.8 | 99.9 | 98.1 | 144.1 |
| 25000 | 78.0 | 83.1 | 86.6 | 86.5 | 92.3 | 93.2 | 90.5 | 91.8 | 95.5 | 95.1 | 95.7 | 96.0 | 96.1 | 142.6 |
| 31500 | 75.8 | 79.1 | 83.0 | 85.2 | 86.5 | 87.8 | 87.2 | 89.0 | 91.8 | 93.8 | 93.5 | 91.0 | 90.6 | 142.3 |
| 40000 | 70.5 | 74.0 | 78.0 | 79.5 | 84.5 | 85.5 | 81.3 | 83.3 | 86.7 | 88.6 | 88.1 | 84.8 | 86.2 | 141.5 |
| 50000 | 62.6 | 66.8 | 69.8 | 73.0 | 76.0 | 77.3 | 75.7 | 76.1 | 82.6 | 81.3 | 82.4 | 80.5 | 79.9 | 139.6 |
| 63000 | 57.0 | 61.0 | 63.7 | 65.9 | 67.5 | 68.7 | 70.2 | 69.8 | 77.8 | 75.2 | 76.1 | 75.6 | 74.7 | 139.0 |
| 80000 | 51.7 | 54.8 | 58.1 | 60.8 | 61.1 | 63.5 | 62.5 | 64.2 | 72.0 | 69.2 | 72.3 | 68.0 | 67.5 | 140.1 |
| 6ASPL | 105.3 | 107.5 | 108.0 | 107.9 | 109.2 | 111.2 | 112.0 | 115.2 | 120.8 | 123.5 | 126.2 | 126.5 | 124.2 | 162.2 |

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000
 FREE JET VELOCITY (FT/SEC) 0.
 FREE JET DIAMETER (IN) 48.00
 REFRACTION CORRECTION - YES
 TURBULANCE CORRECTION - YES

TEST DATE 02-07-78
 LOCATION C41 ANECH CH
 TAPE NO. N291
 AERO. RDG. ADH047
 ALPHA SB59
 PAMB 29.6949
 TAMB 15.62
 RELHUM 44.80

MODEL TEST POINT 0118
 ACUSTIC RANGE 12.2 M (40.0 FT)
 ARC 132.4 SQ CM (20.52 SQ IN)
 SIZE
 FREE-JET SPEED 0. M/SEC (0. FPS)

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07/19/79 16.690

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FM0DL X01180
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PVL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

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OF POOR QUALITY

TEST DATE 02-07-78

LOCATION C41 ANECH CH

TAPE NO. M291

AERO. RDG. ADH047

ALPHA S859

PAMB 29.6949

TAMB 15.62

REL HUM 44.80

MODEL TEST POINT

0118

ACOUSTIC RANGE

12.2 M (40.0 FT) ARC

SIZE

132.4 SQ CH (20.52 SQ IN) - MODEL

FREE-JET SPEED

0. M/SEC (0. FPS)

133

07/19/79 18.690

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 .59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X01185

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 65.8 | 69.4 | 71.2 | 71.0 | 73.0 | 75.7 | 76.5 | 78.5 | 85.2 | 91.2 | 92.3 | 91.3 | 85.9 | 167.0 |
| 63 | 66.9 | 70.7 | 73.3 | 73.0 | 74.5 | 77.0 | 77.5 | 79.5 | 86.0 | 92.8 | 93.6 | 92.1 | 86.4 | 168.2 |
| 80 | 67.4 | 71.5 | 73.4 | 74.4 | 78.6 | 78.4 | 78.9 | 81.9 | 87.9 | 93.1 | 94.7 | 92.9 | 87.4 | 169.1 |
| 100 | 71.6 | 72.5 | 74.3 | 75.8 | 77.1 | 78.9 | 80.1 | 83.3 | 89.6 | 93.1 | 95.1 | 93.6 | 88.0 | 169.7 |
| 125 | 74.6 | 76.5 | 78.9 | 78.4 | 78.4 | 80.6 | 81.1 | 84.1 | 91.1 | 92.6 | 94.4 | 92.8 | 87.4 | 169.5 |
| 160 | 71.5 | 76.5 | 78.3 | 78.6 | 79.9 | 81.9 | 82.1 | 85.1 | 91.0 | 92.3 | 93.8 | 92.9 | 86.6 | 169.5 |
| 200 | 73.1 | 74.2 | 76.1 | 77.4 | 78.9 | 81.6 | 82.9 | 85.6 | 91.2 | 92.0 | 93.3 | 91.6 | 85.8 | 169.2 |
| 250 | 74.0 | 77.7 | 78.2 | 77.7 | 78.8 | 80.8 | 82.3 | 85.0 | 91.3 | 91.6 | 92.3 | 90.3 | 82.8 | 168.6 |
| 315 | 71.7 | 74.5 | 76.5 | 77.9 | 79.1 | 81.1 | 82.9 | 85.4 | 90.7 | 91.7 | 92.3 | 88.6 | 80.3 | 168.5 |
| 400 | 71.5 | 76.1 | 76.9 | 77.5 | 78.6 | 81.6 | 82.6 | 85.5 | 90.3 | 89.8 | 91.3 | 86.9 | 78.1 | 167.9 |
| 500 | 71.3 | 74.3 | 75.9 | 76.8 | 77.6 | 80.1 | 82.1 | 84.8 | 89.3 | 89.2 | 89.6 | 84.8 | 76.4 | 167.1 |
| 630 | 69.8 | 74.5 | 76.1 | 76.8 | 78.4 | 80.2 | 82.1 | 85.3 | 88.5 | 88.6 | 87.9 | 82.7 | 74.9 | 166.7 |
| 800 | 68.0 | 73.6 | 75.8 | 76.2 | 78.0 | 80.8 | 81.3 | 84.0 | 87.9 | 87.7 | 86.1 | 81.3 | 73.4 | 166.2 |
| 1000 | 66.7 | 73.6 | 75.3 | 76.2 | 78.0 | 80.1 | 80.7 | 83.3 | 86.7 | 86.0 | 84.5 | 79.3 | 71.9 | 165.6 |
| 1250 | 64.5 | 72.1 | 74.6 | 75.8 | 78.3 | 80.6 | 79.8 | 82.8 | 85.3 | 84.9 | 82.6 | 77.5 | 68.5 | 165.3 |
| 1600 | 60.4 | 69.3 | 72.3 | 74.5 | 76.8 | 79.1 | 78.3 | 80.8 | 82.0 | 81.9 | 79.4 | 73.9 | 64.2 | 163.9 |
| 2000 | 57.2 | 66.3 | 70.7 | 73.3 | 76.2 | 78.2 | 76.9 | 78.8 | 79.9 | 79.8 | 76.1 | 70.6 | 60.3 | 163.7 |
| 2500 | 50.6 | 61.9 | 66.0 | 69.4 | 74.6 | 76.7 | 73.3 | 75.3 | 76.3 | 74.4 | 70.7 | 64.7 | 51.6 | 162.4 |
| 3150 | 45.6 | 55.2 | 61.7 | 63.4 | 70.3 | 71.5 | 68.5 | 68.7 | 70.7 | 67.3 | 63.3 | 55.8 | 41.2 | 160.9 |
| 4000 | 37.1 | 46.5 | 54.3 | 58.9 | 61.5 | 63.2 | 62.2 | 62.6 | 63.1 | 61.3 | 54.8 | 42.0 | 21.2 | 160.7 |
| 5000 | 22.1 | 33.9 | 43.0 | 47.7 | 54.5 | 56.0 | 51.3 | 51.5 | 51.8 | 48.5 | 39.7 | 22.0 | | 159.8 |
| 6300 | | 12.5 | 22.8 | 30.5 | 35.9 | 37.9 | 36.6 | 33.6 | 35.6 | 26.9 | 16.1 | | | 157.9 |
| 8000 | | | 4.1 | 9.3 | 11.6 | 12.0 | 8.0 | 9.5 | | | | | | 157.4 |
| 10000 | | | | | | | | | | | | | | 158.4 |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| GASPL | 82.7 | 86.3 | 88.1 | 88.7 | 90.4 | 92.6 | 93.3 | 96.0 | 101.2 | 102.9 | 103.9 | 101.9 | 95.9 | 180.4 |
| PNL | 86.5 | 91.5 | 94.1 | 95.8 | 98.5 | 100.6 | 100.1 | 102.4 | 106.3 | 106.8 | 106.9 | 103.6 | 86.6 | |
| PNLT | 87.0 | 92.1 | 94.1 | 96.3 | 99.8 | 101.8 | 100.1 | 102.4 | 106.9 | 106.8 | 106.9 | 103.6 | 97.6 | |

DIAMETER RATIO 8.260 FREQUENCY SHIFT -9

TEST DATE 02-07-76 TAPE NO. N291 ALPHA SB59 TAMB 15.82
 LOCATION C41 ANECH CH AERG. RDG. ADH047 PAMB 29.6949 RELHJM 44.80

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
 0100 0118 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)

07/19/79 16.690

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X01190
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. FWL

FREQ

50

63

80

100

125

160

200

250 84.5 89.1 87.8 88.1 89.0 91.8 93.7 95.6 99.8 105.2 110.3 113.0 113.1 146.4
315 84.9 88.2 88.9 89.0 90.8 93.2 93.6 95.5 102.4 107.8 111.9 114.6 113.5 147.9
400 87.7 89.7 90.0 89.5 91.3 93.5 94.3 97.0 104.0 111.3 114.4 118.1 113.8 149.7
500 88.0 90.0 92.3 91.1 91.9 94.5 95.4 97.8 105.1 113.1 116.5 116.7 114.6 151.1
630 89.1 92.1 92.2 92.2 96.0 96.2 97.0 100.4 107.7 113.5 117.1 117.8 116.2 151.9
800 93.4 92.9 93.7 94.2 95.3 97.4 98.1 101.7 109.4 114.3 117.6 118.6 116.2 152.8
1000 97.2 98.3 98.8 97.3 96.7 98.6 99.4 103.1 110.3 114.1 117.0 118.7 115.8 152.7
1250 94.1 97.7 97.7 97.7 99.0 100.9 101.0 103.7 110.6 113.5 118.1 118.3 115.2 152.8
1600 96.2 95.1 96.1 96.1 97.4 100.1 101.2 104.4 111.0 113.2 117.4 117.3 114.1 152.2
2000 96.9 95.4 98.4 96.9 97.3 99.1 100.3 104.7 111.3 113.8 116.7 115.7 110.7 151.6
2500 95.0 96.6 96.8 97.1 98.2 99.8 101.7 105.1 110.7 113.4 117.1 113.8 109.3 151.3
3150 95.8 98.3 97.3 97.3 98.2 100.0 101.7 105.8 111.5 113.2 116.4 113.1 108.3 151.0
4000 96.0 98.3 97.6 97.1 97.7 99.6 101.4 105.4 110.3 112.5 114.4 111.3 106.8 149.8
5000 96.1 98.2 98.2 97.4 97.8 100.1 101.5 105.4 110.1 112.1 113.2 110.9 106.6 149.4
6300 94.0 96.9 98.6 97.6 98.4 100.5 101.5 104.9 109.3 111.2 111.8 109.9 106.8 148.8
8000 92.4 96.2 97.1 97.7 98.5 100.4 101.0 104.1 108.2 109.8 110.7 108.1 105.7 148.1
10000 90.2 94.5 96.7 96.1 98.7 100.9 100.2 103.5 107.1 108.6 108.8 107.4 104.5 147.5
12500 87.5 92.6 94.2 95.1 96.9 99.6 98.6 102.1 104.5 106.2 107.0 105.3 102.6 146.3
16000 85.3 91.4 93.3 94.4 97.1 98.8 97.5 100.4 102.3 104.5 103.9 103.7 100.9 145.8
20000 80.0 88.0 90.3 91.9 95.7 97.1 94.5 97.8 99.3 101.0 100.8 100.3 98.9 144.7
25000 78.5 83.8 87.1 87.7 92.6 94.2 91.5 92.5 96.6 96.1 96.7 97.0 96.8 143.5
31500 76.8 79.8 84.3 86.5 87.3 88.3 87.5 89.5 92.6 95.3 93.7 91.5 90.4 143.0
40000 71.5 75.2 78.7 80.5 85.0 86.0 86.0 81.8 84.3 87.5 89.0 89.1 86.5 142.2
50000 64.3 67.8 71.3 73.8 76.2 78.0 76.2 76.4 83.1 83.2 83.6 80.7 79.4 140.4
63000 58.5 61.8 64.4 67.1 67.7 69.7 70.9 69.7 78.6 76.0 76.8 75.9 74.2 139.6
80000 52.1 55.6 58.8 61.6 61.3 64.2 63.0 64.4 72.2 70.9 72.5 68.3 67.7 140.6

GASPL 106.4 108.6 109.0 108.7 109.9 111.9 112.6 116.0 121.6 124.8 127.9 127.8 125.0 163.4

TEST DATE 02-07-78 TAPE NO. N291 ALPHA SB59 TAMB 14.90
LOCATION C41 ANECH CH AERO. RDG. ADH048 PAMB 29.6949 RELHUM 45.50

MODEL TEST POINT 0100 0119 ACQUSTIC RANGE 12.2 M (40.0 FT) ARC 132.4 SQ CM (20.52 SQ IN) - MODEL 0. FREE-JET SPEED 0. FPS

135

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07/19/79 18.630

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X01190

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 84.5 | 89.1 | 87.8 | 88.1 | 89.0 | 91.8 | 93.7 | 95.6 | 99.8 | 105.2 | 110.3 | 113.0 | 113.1 | 146.4 |
| 315 | 84.9 | 88.2 | 88.9 | 89.0 | 90.8 | 93.2 | 93.6 | 95.5 | 102.4 | 107.8 | 111.9 | 114.6 | 113.5 | 147.9 |
| 400 | 87.7 | 89.7 | 90.0 | 89.5 | 91.3 | 93.5 | 94.3 | 97.0 | 104.0 | 111.3 | 114.4 | 116.1 | 113.8 | 149.7 |
| 500 | 88.0 | 90.0 | 92.3 | 91.1 | 91.9 | 94.5 | 95.4 | 97.8 | 105.1 | 113.1 | 116.5 | 116.7 | 114.6 | 151.1 |
| 630 | 89.1 | 92.1 | 92.2 | 92.2 | 96.0 | 96.2 | 97.0 | 100.4 | 107.7 | 113.5 | 117.1 | 117.8 | 115.2 | 151.9 |
| 800 | 93.4 | 92.9 | 93.7 | 94.2 | 95.3 | 97.4 | 98.1 | 101.7 | 109.4 | 114.3 | 117.6 | 118.6 | 116.2 | 152.8 |
| 1000 | 97.2 | 90.3 | 98.8 | 97.3 | 96.7 | 98.8 | 99.4 | 103.1 | 110.3 | 114.1 | 117.0 | 118.7 | 115.3 | 152.7 |
| 1250 | 94.1 | 97.7 | 97.7 | 97.7 | 99.0 | 100.9 | 101.0 | 103.7 | 110.6 | 113.5 | 116.1 | 118.3 | 115.2 | 152.8 |
| 1600 | 96.2 | 95.1 | 96.1 | 96.1 | 97.4 | 100.1 | 101.2 | 104.4 | 111.0 | 113.2 | 117.4 | 117.3 | 114.1 | 152.2 |
| 2000 | 96.9 | 99.4 | 98.4 | 96.9 | 97.3 | 99.1 | 100.3 | 104.7 | 111.3 | 113.8 | 116.7 | 115.7 | 110.7 | 151.6 |
| 2500 | 95.0 | 96.6 | 96.8 | 97.1 | 98.2 | 99.8 | 101.7 | 105.1 | 110.7 | 113.4 | 117.1 | 113.8 | 109.3 | 151.3 |
| 3150 | 95.8 | 98.3 | 97.3 | 97.3 | 98.2 | 100.0 | 101.7 | 105.8 | 111.5 | 113.2 | 116.4 | 113.1 | 108.3 | 151.0 |
| 4000 | 96.0 | 98.3 | 97.6 | 97.1 | 97.7 | 99.6 | 101.4 | 105.4 | 110.3 | 112.5 | 114.4 | 111.3 | 106.8 | 149.8 |
| 5000 | 96.1 | 98.2 | 97.4 | 97.8 | 100.1 | 101.5 | 105.4 | 110.1 | 112.1 | 113.2 | 110.9 | 106.6 | 149.4 | |
| 6300 | 94.0 | 96.9 | 98.6 | 97.6 | 98.4 | 100.5 | 101.5 | 104.9 | 109.3 | 111.2 | 111.8 | 108.9 | 106.8 | 148.8 |
| 8000 | 92.4 | 96.2 | 97.1 | 97.7 | 98.5 | 100.4 | 101.0 | 104.1 | 108.2 | 109.8 | 110.7 | 108.1 | 105.7 | 148.1 |
| 10000 | 90.2 | 94.5 | 96.7 | 96.1 | 98.7 | 100.9 | 100.2 | 103.5 | 107.1 | 108.6 | 108.8 | 107.4 | 104.5 | 147.5 |
| 12500 | 87.5 | 92.6 | 94.2 | 95.1 | 96.9 | 99.6 | 98.6 | 102.1 | 104.5 | 106.2 | 107.0 | 105.3 | 102.6 | 146.3 |
| 16000 | 85.3 | 91.4 | 93.3 | 94.4 | 97.1 | 98.8 | 97.5 | 100.4 | 102.3 | 104.5 | 103.9 | 103.7 | 100.9 | 145.8 |
| 20000 | 80.0 | 88.0 | 90.3 | 91.9 | 95.7 | 97.1 | 94.5 | 97.8 | 99.3 | 101.0 | 100.8 | 100.3 | 98.9 | 144.7 |
| 25000 | 78.5 | 83.8 | 87.1 | 87.7 | 92.6 | 94.2 | 91.5 | 92.5 | 96.6 | 96.1 | 96.7 | 97.0 | 96.8 | 143.5 |
| 31500 | 76.8 | 79.8 | 84.3 | 86.5 | 87.3 | 88.3 | 87.5 | 89.5 | 92.6 | 95.3 | 93.7 | 91.5 | 90.4 | 143.0 |
| 40000 | 71.5 | 75.2 | 78.7 | 80.5 | 85.0 | 86.0 | 81.8 | 84.3 | 87.5 | 89.0 | 89.1 | 88.5 | 86.2 | 142.2 |
| 50000 | 64.3 | 67.8 | 71.3 | 73.8 | 76.2 | 78.0 | 76.2 | 76.4 | 83.1 | 83.2 | 83.6 | 80.7 | 79.4 | 140.4 |
| 63000 | 58.5 | 61.8 | 64.4 | 67.1 | 67.7 | 69.7 | 70.9 | 69.7 | 78.6 | 76.0 | 76.8 | 75.9 | 74.2 | 139.6 |
| 80000 | 52.1 | 55.6 | 58.8 | 61.6 | 61.3 | 64.2 | 63.0 | 64.4 | 72.2 | 70.9 | 72.5 | 68.3 | 67.7 | 140.6 |
| QASPL | 106.4 | 108.6 | 109.0 | 108.7 | 109.9 | 111.9 | 112.6 | 116.0 | 121.6 | 124.8 | 127.9 | 127.8 | 125.0 | 163.4 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 0. | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|-------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 02-07-78 | TAPE NO. | N291 | ALPHA | SB59 | TAMB | 14.90 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERG. RDG. | ADH048 | PAMB | 29.5949 | RELHUM | 45.50 |

| MODEL | TEST POINT | ACQUSTIC RANGE | 12.2 M (40.0 FT) ARC | 132.4 SQ CM (20.52 SQ IN) - MODEL | SIZE | FREE-JET SPEED |
|-------|------------|----------------|-----------------------|------------------------------------|------|-----------------|
| 0100 | 0119 | | | | 0. | M/SEC (0. FPS) |

07/19/79 18.690

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 98 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X01195

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 66.6 | 70.1 | 71.5 | 71.7 | 74.0 | 76.2 | 77.0 | 79.2 | 85.5 | 91.7 | 93.3 | 92.8 | 87.1 | 160.1 |
| 63 | 66.9 | 70.4 | 73.8 | 73.3 | 74.5 | 77.3 | 78.0 | 80.0 | 86.5 | 93.5 | 95.4 | 93.3 | 87.9 | 169.4 |
| 80 | 67.9 | 72.5 | 73.6 | 74.4 | 78.6 | 78.9 | 79.6 | 82.6 | 89.1 | 93.8 | 95.9 | 94.4 | 88.4 | 170.3 |
| 100 | 72.1 | 73.2 | 75.1 | 76.3 | 77.9 | 80.1 | 80.6 | 83.8 | 90.8 | 94.6 | 96.4 | 95.1 | 89.3 | 171.1 |
| 125 | 75.9 | 78.5 | 80.1 | 79.4 | 79.1 | 81.4 | 81.9 | 85.1 | 91.6 | 94.3 | 95.6 | 95.0 | 88.7 | 171.0 |
| 160 | 72.5 | 77.7 | 78.8 | 79.6 | 81.4 | 83.4 | 83.4 | 85.6 | 91.7 | 93.6 | 95.6 | 94.4 | 87.6 | 171.2 |
| 200 | 74.4 | 74.9 | 77.1 | 77.9 | 79.6 | 82.4 | 83.4 | 86.1 | 92.0 | 93.0 | 95.6 | 93.1 | 86.1 | 170.5 |
| 250 | 74.7 | 78.0 | 79.2 | 78.5 | 79.3 | 81.3 | 82.3 | 86.2 | 92.1 | 93.4 | 94.6 | 91.0 | 82.0 | 169.9 |
| 315 | 72.5 | 75.8 | 77.3 | 78.3 | 79.9 | 81.6 | 83.4 | 86.3 | 91.2 | 92.7 | 94.6 | 88.8 | 79.8 | 169.8 |
| 400 | 72.7 | 77.1 | 77.4 | 78.3 | 79.6 | 81.6 | 83.1 | 86.8 | 91.6 | 92.0 | 93.3 | 87.2 | 77.8 | 169.3 |
| 500 | 72.5 | 76.8 | 77.4 | 77.8 | 78.8 | 80.8 | 82.6 | 86.0 | 90.0 | 90.9 | 90.9 | 84.8 | 75.4 | 168.1 |
| 630 | 72.1 | 76.2 | 77.6 | 77.8 | 78.6 | 81.1 | 82.4 | 85.8 | 89.5 | 90.1 | 89.2 | 83.7 | 74.1 | 167.8 |
| 800 | 69.5 | 74.5 | 77.8 | 77.7 | 79.0 | 81.3 | 82.1 | 85.0 | 88.4 | 88.9 | 87.3 | 82.0 | 73.2 | 167.2 |
| 1000 | 67.4 | 73.6 | 76.0 | 76.6 | 79.0 | 81.1 | 81.5 | 84.0 | 87.1 | 87.2 | 85.7 | 79.6 | 70.9 | 166.4 |
| 1250 | 64.8 | 71.6 | 75.4 | 75.8 | 79.0 | 81.4 | 80.6 | 83.3 | 85.8 | 85.6 | 83.3 | 78.0 | 68.3 | 165.8 |
| 1600 | 61.2 | 69.0 | 72.5 | 74.5 | 77.0 | 79.9 | 78.8 | 81.5 | 82.7 | 82.6 | 80.6 | 74.6 | 63.9 | 164.6 |
| 2000 | 57.9 | 67.3 | 71.1 | 73.5 | 77.0 | 79.0 | 77.4 | 79.5 | 80.1 | 80.3 | 76.6 | 71.4 | 59.3 | 164.2 |
| 2500 | 50.9 | 62.6 | 67.3 | 70.4 | 75.0 | 76.7 | 73.8 | 76.3 | 76.3 | 75.8 | 71.7 | 65.2 | 52.3 | 163.1 |
| 3150 | 46.1 | 56.0 | 62.2 | 64.6 | 70.5 | 72.5 | 69.5 | 69.4 | 71.7 | 68.2 | 64.3 | 56.8 | 41.9 | 161.8 |
| 4000 | 38.1 | 47.2 | 55.6 | 60.1 | 62.2 | 63.7 | 62.4 | 63.1 | 63.9 | 62.8 | 55.0 | 42.4 | 20.9 | 161.4 |
| 5000 | 23.1 | 35.1 | 43.8 | 48.7 | 55.0 | 56.5 | 51.8 | 52.5 | 52.5 | 48.9 | 40.6 | 23.7 | 160.5 | |
| 6300 | | 13.5 | 24.3 | 31.2 | 36.1 | 38.7 | 36.1 | 33.8 | 35.1 | 28.9 | 17.4 | | 158.7 | |
| 8000 | | | | 5.3 | 9.5 | 12.6 | 12.7 | 8.0 | 10.2 | | | | 158.0 | |
| 10000 | | | | | | | | | | | | | 159.0 | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| OASPL | 83.7 | 87.5 | 89.0 | 89.5 | 91.2 | 93.3 | 93.9 | 96.9 | 101.9 | 104.1 | 105.7 | 103.3 | 96.8 | 181.6 |
| PWL | 87.4 | 92.5 | 94.9 | 96.4 | 99.1 | 101.2 | 100.6 | 103.1 | 107.2 | 108.1 | 108.6 | 104.7 | 96.8 | |
| PWLT | 88.0 | 93.6 | 95.4 | 96.4 | 100.4 | 102.4 | 100.6 | 103.1 | 107.7 | 108.1 | 108.6 | 104.7 | 98.0 | |

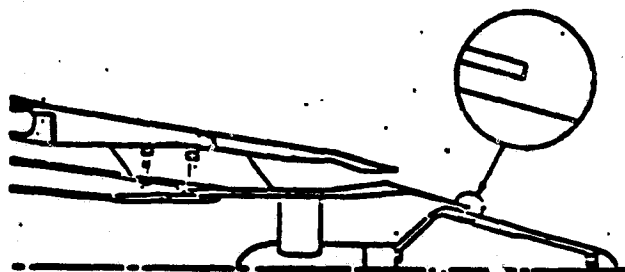
DIAMETER RATIO 8.260 FREQUENCY SHIFT -9

TEST DATE 02-07-78 TAPE NO. N291 IALPHA 5859 TAMB 14.90
 LOCATION C41 ANECH CH AERG. ROG. ADH048 PAMB 29.6949 RELHUM 45.50

MODEL TEST POINT 0119 ACOUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 0. FREE-JET SPEED M/SEC (0, FPS)

6.1.2 Measured Acoustic Data for Model 1A

$R_r^o = 0.853$ C-D outer nozzle
 $R_r^i = 0.933$ conic inner nozzle
 $A^i/A^o = 0.194$
with struts in outer flow



07/19/79 15.714

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-AMODL X01010
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 66.3 | 91.6 | 91.3 | 91.1 | 91.0 | 93.6 | 96.0 | 98.9 | 100.6 | 107.7 | 112.6 | 119.0 | 116.9 | 150.5 |
| 315 | 67.9 | 99.9 | 90.7 | 91.5 | 93.8 | 95.9 | 96.1 | 98.7 | 102.7 | 110.0 | 114.6 | 120.3 | 117.0 | 152.0 |
| 400 | 89.2 | 91.2 | 92.2 | 92.0 | 93.1 | 95.5 | 96.6 | 99.2 | 104.2 | 114.0 | 116.9 | 122.1 | 116.6 | 153.8 |
| 500 | 90.2 | 92.0 | 93.5 | 93.6 | 94.9 | 97.3 | 97.9 | 100.3 | 105.3 | 115.6 | 118.7 | 122.9 | 117.1 | 154.9 |
| 630 | 91.3 | 93.9 | 95.1 | 94.9 | 96.5 | 98.1 | 99.3 | 102.4 | 107.9 | 116.5 | 120.3 | 123.5 | 117.9 | 155.9 |
| 800 | 96.1 | 94.4 | 95.2 | 97.2 | 97.3 | 99.4 | 100.5 | 104.4 | 109.9 | 117.0 | 120.9 | 123.8 | 117.7 | 156.3 |
| 1000 | 99.9 | 99.7 | 100.7 | 99.0 | 99.4 | 101.0 | 102.1 | 105.5 | 111.5 | 117.1 | 121.4 | 124.1 | 117.5 | 156.8 |
| 1250 | 99.3 | 102.1 | 103.6 | 102.9 | 102.5 | 103.8 | 104.0 | 107.1 | 111.3 | 116.7 | 122.5 | 123.5 | 116.1 | 156.8 |
| 1600 | 107.3 | 103.2 | 102.8 | 102.0 | 101.3 | 103.5 | 104.1 | 107.7 | 112.5 | 117.0 | 122.8 | 121.7 | 114.2 | 156.5 |
| 2000 | 107.5 | 106.3 | 106.0 | 104.6 | 101.7 | 102.3 | 103.9 | 108.1 | 112.6 | 117.6 | 121.3 | 119.1 | 111.6 | 155.4 |
| 2500 | 105.7 | 106.7 | 107.2 | 106.7 | 106.1 | 104.7 | 105.1 | 108.7 | 112.4 | 119.0 | 119.7 | 118.0 | 110.0 | 155.2 |
| 3150 | 104.2 | 105.0 | 105.0 | 106.3 | 107.1 | 107.7 | 108.3 | 109.5 | 113.0 | 116.6 | 118.0 | 116.7 | 109.5 | 154.6 |
| 4000 | 102.8 | 102.4 | 104.2 | 105.0 | 105.6 | 106.6 | 107.5 | 109.7 | 112.4 | 116.0 | 116.9 | 114.9 | 107.4 | 153.8 |
| 5000 | 101.8 | 102.7 | 103.2 | 103.9 | 104.0 | 105.8 | 107.5 | 110.4 | 111.9 | 116.1 | 115.7 | 114.6 | 106.3 | 153.8 |
| 6300 | 99.5 | 101.9 | 103.5 | 103.2 | 103.9 | 106.0 | 107.0 | 110.7 | 112.1 | 116.6 | 114.1 | 113.4 | 106.1 | 152.9 |
| 8000 | 99.0 | 101.8 | 102.9 | 103.4 | 104.2 | 105.6 | 106.2 | 109.5 | 111.6 | 115.3 | 113.4 | 111.3 | 105.0 | 152.3 |
| 10000 | 96.8 | 100.2 | 102.3 | 102.8 | 104.1 | 106.0 | 104.9 | 108.5 | 110.6 | 114.6 | 112.3 | 110.7 | 104.8 | 152.0 |
| 12500 | 93.9 | 97.6 | 99.7 | 101.4 | 103.1 | 104.0 | 104.0 | 106.9 | 108.8 | 112.7 | 110.1 | 108.4 | 102.9 | 151.0 |
| 16000 | 91.9 | 95.8 | 98.4 | 100.0 | 102.6 | 104.1 | 102.3 | 105.5 | 106.6 | 111.2 | 108.2 | 106.7 | 101.1 | 150.9 |
| 20000 | 85.9 | 93.2 | 95.2 | 97.9 | 100.8 | 102.1 | 99.3 | 102.5 | 104.4 | 108.2 | 105.4 | 103.3 | 98.5 | 149.9 |
| 25000 | 84.1 | 89.8 | 92.3 | 92.8 | 97.8 | 98.7 | 96.3 | 97.4 | 101.9 | 103.1 | 101.8 | 101.1 | 96.4 | 148.5 |
| 31500 | 82.4 | 85.5 | 89.6 | 92.5 | 92.4 | 93.3 | 92.6 | 94.5 | 97.9 | 101.6 | 97.4 | 94.5 | 90.7 | 148.2 |
| 40000 | 77.5 | 80.5 | 84.4 | 86.8 | 90.6 | 91.3 | 87.7 | 89.6 | 92.9 | 96.1 | 93.1 | 89.3 | 86.8 | 147.6 |
| 50000 | 70.2 | 75.1 | 77.5 | 80.6 | 82.3 | 84.0 | 82.5 | 83.4 | 89.0 | 90.3 | 87.7 | 84.4 | 81.2 | 146.2 |
| 63000 | 65.0 | 70.7 | 71.3 | 74.1 | 74.8 | 75.6 | 77.0 | 77.5 | 83.0 | 84.5 | 81.3 | 79.0 | 75.7 | 145.0 |
| 80000 | 58.9 | 64.2 | 65.7 | 69.6 | 67.6 | 70.7 | 70.0 | 71.7 | 79.7 | 80.3 | 76.7 | 71.4 | 68.4 | 147.6 |

OASPL 114.2 114.3 115.0 115.1 115.5 116.8 117.0 120.2 123.4 129.1 131.4 132.9 126.9 167.5

TEST DATE 03-29-78

LOCATION C41 ANECH CH

TAPE NO. N313

AERO. RDO. ADH214

IALPHA 5859

PAMB 29.5600

TAMB 53.96

RELHUM 34.20

MODEL TEST POINT

0100A 0101A

ACOUSTIC RANGE

12.2 M (

40.0 FT) ARC

SIZE

139.0 SQ CM (

21.55 SQ IN) - MODEL

FREE-JET SPEED

0.

M/SEC (

0. FPS)

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-AMODL X01010

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PVL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1500

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

10000000

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MODEL/FULL SIZE SCALE FACTOR
INPUT 1.000 CALC. 1.000

FREE JET VELOCITY (FT/SEC)
FREE JET DIAMETER (IN)

FREE JET VELOCITY (FT/SEC)
FREE JET DIAMETER (IN)

REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

TEST DATE 03-29-78 TAPE NO. N313 ALPHA 3859 TAMB 53.96
LOCATION C41 ANECH CH AERO. RDG. ADH214 PAMB 29.5600 RELHUM 34.20

MODEL TEST POINT 0100A 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 0. M/SEC (0. FPS)
ACQUSTIC RANGE SIZE

FREE-JET SPEED

07/19/79 15.714

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-AMODL X01015

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| 50 | 67.8 | 71.4 | 73.5 | 74.0 | 75.5 | 76.0 | 79.3 | 81.3 | 85.5 | 94.2 | 95.6 | 98.6 | 99.9 | 171.9 |
| 63 | 68.9 | 72.2 | 74.8 | 75.8 | 77.3 | 78.8 | 80.3 | 82.3 | 86.6 | 95.5 | 97.4 | 99.1 | 90.2 | 173.0 |
| 80 | 70.4 | 74.0 | 76.4 | 76.9 | 78.9 | 80.6 | 81.6 | 84.4 | 89.1 | 96.6 | 98.9 | 99.9 | 90.9 | 174.0 |
| 100 | 74.6 | 74.5 | 77.3 | 79.1 | 79.6 | 81.9 | 82.9 | 86.3 | 91.1 | 97.1 | 99.4 | 100.1 | 90.5 | 174.4 |
| 125 | 76.3 | 79.7 | 81.8 | 80.9 | 81.6 | 83.4 | 84.4 | 87.4 | 92.6 | 97.1 | 99.9 | 100.2 | 90.1 | 174.9 |
| 160 | 78.0 | 81.9 | 84.5 | 84.6 | 84.8 | 86.1 | 86.1 | 88.8 | 92.3 | 96.5 | 100.8 | 99.3 | 88.4 | 175.0 |
| 200 | 85.3 | 82.8 | 83.2 | 83.5 | 83.3 | 85.6 | 86.1 | 89.3 | 93.2 | 96.7 | 100.7 | 97.3 | 86.0 | 174.6 |
| 250 | 85.2 | 85.6 | 86.6 | 85.9 | 83.4 | 84.2 | 85.7 | 89.4 | 93.3 | 97.0 | 99.0 | 94.2 | 82.7 | 173.6 |
| 315 | 82.9 | 85.7 | 87.4 | 87.8 | 87.6 | 86.3 | 86.6 | 89.8 | 92.7 | 98.1 | 97.0 | 92.5 | 80.3 | 173.3 |
| 400 | 80.9 | 83.6 | 84.9 | 87.0 | 88.3 | 89.1 | 87.5 | 90.2 | 92.9 | 97.2 | 94.8 | 90.7 | 78.8 | 172.7 |
| 500 | 79.1 | 80.6 | 83.7 | 84.6 | 85.9 | 87.9 | 88.4 | 90.1 | 92.0 | 96.3 | 93.2 | 88.1 | 75.7 | 171.9 |
| 630 | 77.6 | 80.5 | 82.4 | 84.0 | 84.6 | 86.6 | 88.4 | 90.5 | 91.2 | 95.9 | 91.5 | 87.2 | 73.6 | 171.7 |
| 800 | 74.8 | 79.4 | 82.4 | 83.0 | 84.3 | 86.6 | 87.4 | 90.5 | 91.0 | 94.1 | 89.4 | 85.3 | 72.2 | 171.0 |
| 1000 | 73.2 | 78.9 | 81.6 | 83.1 | 84.5 | 86.0 | 86.4 | 89.2 | 90.3 | 92.4 | 88.3 | 82.5 | 70.0 | 170.4 |
| 1250 | 71.1 | 77.0 | 80.0 | 82.3 | 84.2 | 86.3 | 85.0 | 88.0 | 89.1 | 91.4 | 86.6 | 81.2 | 68.4 | 170.2 |
| 1600 | 67.3 | 73.8 | 77.7 | 80.6 | 83.0 | 84.0 | 83.8 | 86.1 | 86.9 | 88.9 | 83.6 | 77.5 | 64.0 | 169.1 |
| 2000 | 64.4 | 71.5 | 76.1 | 79.0 | 82.3 | 84.0 | 82.0 | 84.5 | 84.4 | 86.9 | 80.7 | 74.1 | 59.2 | 169.0 |
| 2500 | 56.6 | 67.6 | 72.0 | 75.2 | 79.9 | 81.5 | 78.4 | 80.8 | 81.2 | 82.6 | 76.1 | 67.9 | 51.7 | 168.0 |
| 3150 | 51.4 | 61.7 | 67.2 | 69.6 | 75.6 | 76.7 | 74.0 | 76.8 | 75.0 | 69.1 | 60.8 | 41.2 | 166.6 | |
| 4000 | 43.5 | 52.7 | 60.7 | 65.9 | 67.1 | 68.5 | 67.3 | 67.9 | 69.0 | 69.0 | 58.5 | 45.2 | 21.1 | 166.4 |
| 5000 | 28.8 | 40.2 | 49.3 | 54.8 | 60.4 | 61.8 | 57.4 | 57.6 | 57.8 | 55.8 | 44.5 | 26.3 | | 165.7 |
| 6300 | 3.7 | 20.5 | 30.2 | 37.8 | 42.0 | 44.5 | 42.2 | 40.7 | 41.0 | 35.8 | 21.2 | | | 164.4 |
| 8000 | | | | | | | | | | | | | | 164.1 |
| 10000 | | | | | | | | | | | | | | 165.7 |

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QASPL 91.4 93.0 94.9 95.7 96.4 97.8 97.9 100.7 103.3 107.9 109.1 108.3 98.4 165.5
 PWL 95.5 98.4 101.0 102.3 104.4 105.9 105.0 107.5 109.2 113.0 112.1 108.9 97.6
 PWLT 96.7 98.4 101.0 102.3 105.7 107.1 105.0 107.5 109.7 113.6 113.1 108.9 98.8

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-29-76 TAPE NO. N313 ALPHA 9859 TAMB 53.96
 LOCATION C41 ANECH CH AERO. RDG. ADH214 PAMB 29.5600 RELHUM 34.20

MODEL TEST POINT ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE FREE-JET SPEED
 0100A 0101A 141 0. M/SEC (0. FPS)

07/19/79 15.714

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-AMODL X01030
BACKGROUND FJB400-FMODL X05220

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

FREQ

50

63

80

100

125

160

200

250 82.4 86.3 86.5 87.8 87.6 89.5 91.9 95.3 97.1 103.1 108.8 116.0 112.9 147.3
315 83.6 85.4 86.9 86.9 89.0 90.9 92.0 94.7 98.4 105.8 110.9 117.6 113.5 148.8
400 86.1 86.7 87.9 87.4 89.0 91.2 91.8 94.7 99.7 109.0 113.7 119.1 112.0 150.3
500 85.8 87.2 89.3 89.8 90.4 92.5 93.1 96.3 101.0 111.6 116.0 119.2 110.3 151.2
630 85.7 88.6 90.6 90.7 92.5 94.1 94.8 98.2 103.4 112.5 116.6 118.8 107.4 151.3
800 89.6 88.9 91.4 92.5 93.3 95.2 96.1 99.7 105.7 113.3 117.4 117.8 105.0 151.4
1000 92.5 91.5 93.1 93.6 94.2 96.5 97.9 100.8 107.3 113.9 117.0 115.9 102.6 151.0
1250 97.1 98.4 97.2 96.2 96.0 97.9 99.0 102.7 107.9 113.5 117.1 115.1 101.2 150.9
1600 104.5 103.6 101.9 99.6 97.7 99.8 100.2 103.6 108.6 114.5 117.4 113.6 102.4 151.4
2000 104.2 104.8 105.8 105.0 100.6 99.5 100.4 104.5 110.3 115.4 117.1 113.8 102.0 151.9
2500 101.4 103.2 105.3 106.0 106.1 104.2 102.8 105.8 109.5 115.6 117.3 113.7 102.5 152.2
3150 99.3 99.6 100.9 102.9 104.9 107.0 105.2 106.4 110.9 116.0 117.2 114.3 102.3 152.5
4000 98.7 99.1 100.8 100.0 101.3 104.2 105.8 107.3 111.1 115.5 115.4 111.7 101.2 151.5
5000 97.9 98.3 100.1 100.5 101.3 103.1 105.3 109.0 110.8 115.5 114.3 109.9 100.1 151.3
6300 96.7 97.4 99.7 99.6 100.3 103.4 103.9 108.6 111.3 114.4 112.3 108.8 99.0 150.6
8000 96.9 97.6 98.5 99.1 100.1 102.0 103.3 106.7 110.7 112.6 110.6 106.9 97.7 149.6
10000 95.3 97.1 99.0 99.0 100.1 102.2 101.9 105.0 109.3 111.5 109.0 106.8 96.4 149.0
12500 91.9 93.2 95.1 97.9 99.1 100.3 99.7 103.6 106.2 109.0 106.0 103.3 94.7 147.3
16000 90.5 91.6 94.7 95.9 99.1 99.6 97.8 101.7 103.5 107.0 103.3 101.5 92.6 146.7
20000 85.2 88.9 91.2 93.3 96.8 98.1 95.5 98.1 100.9 103.2 99.7 98.1 90.8 145.3
25000 83.8 86.0 88.8 94.2 94.8 92.4 92.9 97.4 98.0 95.9 94.3 89.1 143.8
31500 82.1 81.9 86.1 87.9 88.1 88.7 88.8 89.6 94.1 96.0 93.2 89.1 83.4 143.5
40000 77.1 76.4 81.0 82.7 86.9 87.1 83.5 85.0 88.8 90.1 87.6 83.9 79.3 142.8
50000 70.0 71.5 73.4 76.1 78.5 79.2 78.4 77.4 83.5 83.8 81.0 77.6 73.3 140.6
63000 64.5 66.1 66.9 69.5 70.3 71.5 72.8 71.4 78.8 76.9 74.3 71.7 67.5 139.8
80000 58.8 58.0 61.0 64.1 63.3 65.2 64.5 65.0 73.2 71.6 69.1 62.5 59.4 140.6

OASPL 110.6 111.2 112.2 112.4 112.7 114.0 114.1 117.3 121.0 126.0 127.8 127.9 119.6 163.7

TEST DATE 03-29-78 TAPE NO. N313 IALPHA SB59 TAMB 59.10
LOCATION C41 ANECH CH AERG. RDG. ADH218 PAMB 29.5600 RELHUM 12.70

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
0100A 0103A 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 116.67 M/SEC (390.0 FPS)

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07/19/79 15.714

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-AMODL X01030

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 89.7 | 92.2 | 91.1 | 90.9 | 89.1 | 89.5 | 90.1 | 91.8 | 95.0 | 101.5 | 106.1 | 113.2 | 110.9 | 144.8 |
| 315 | 88.6 | 92.2 | 91.1 | 90.9 | 90.8 | 91.1 | 90.7 | 92.0 | 97.0 | 105.4 | 109.6 | 115.8 | 111.2 | 147.2 |
| 400 | 91.0 | 91.6 | 91.7 | 90.2 | 90.7 | 91.4 | 90.9 | 92.5 | 99.3 | 109.3 | 113.5 | 117.9 | 112.3 | 149.6 |
| 500 | 92.7 | 92.3 | 90.5 | 92.2 | 92.8 | 92.4 | 94.6 | 102.2 | 110.9 | 115.2 | 119.2 | 112.3 | 151.1 | |
| 630 | 93.3 | 93.5 | 94.1 | 93.2 | 94.4 | 94.5 | 94.1 | 96.6 | 104.9 | 112.3 | 116.8 | 119.9 | 112.9 | 152.1 |
| 800 | 93.1 | 94.9 | 95.3 | 94.1 | 95.3 | 96.7 | 95.5 | 98.2 | 106.7 | 113.2 | 117.0 | 119.2 | 113.0 | 152.1 |
| 1000 | 97.1 | 95.2 | 96.4 | 95.9 | 96.1 | 97.1 | 97.4 | 99.3 | 107.3 | 112.8 | 117.1 | 118.4 | 111.7 | 151.8 |
| 1250 | 98.9 | 97.1 | 97.6 | 96.8 | 97.7 | 98.7 | 98.8 | 101.1 | 108.1 | 113.8 | 117.5 | 117.1 | 113.1 | 151.9 |
| 1600 | 103.0 | 103.3 | 100.9 | 98.9 | 99.7 | 100.8 | 99.9 | 102.2 | 109.9 | 114.9 | 117.3 | 117.4 | 113.0 | 152.5 |
| 2000 | 111.6 | 109.5 | 106.5 | 102.9 | 102.7 | 100.7 | 100.3 | 103.3 | 109.6 | 115.6 | 118.0 | 117.9 | 113.9 | 153.6 |
| 2500 | 110.6 | 110.0 | 109.9 | 108.0 | 108.8 | 105.7 | 103.1 | 104.9 | 111.4 | 116.5 | 118.4 | 119.0 | 114.3 | 154.8 |
| 3150 | 108.3 | 109.3 | 110.3 | 109.9 | 108.1 | 109.0 | 105.9 | 105.9 | 112.1 | 116.4 | 116.8 | 116.6 | 113.3 | 154.2 |
| 4000 | 108.6 | 106.1 | 106.3 | 107.1 | 104.9 | 106.6 | 107.0 | 107.3 | 111.8 | 116.2 | 115.5 | 114.4 | 111.9 | 153.0 |
| 5000 | 106.0 | 105.6 | 106.4 | 104.6 | 105.3 | 106.1 | 106.8 | 108.2 | 112.3 | 115.1 | 113.8 | 113.3 | 110.7 | 152.4 |
| 6300 | 105.1 | 104.5 | 105.8 | 105.3 | 104.3 | 106.4 | 105.4 | 108.8 | 111.9 | 113.5 | 111.9 | 111.5 | 109.5 | 151.6 |
| 8000 | 103.8 | 103.8 | 105.2 | 104.2 | 104.1 | 105.0 | 104.8 | 106.8 | 110.6 | 112.5 | 110.5 | 110.5 | 108.4 | 150.8 |
| 10000 | 103.8 | 103.9 | 103.9 | 103.5 | 104.1 | 105.2 | 103.4 | 106.1 | 108.0 | 110.4 | 108.1 | 108.6 | 107.4 | 149.9 |
| 12500 | 102.0 | 103.1 | 104.1 | 103.2 | 103.7 | 103.3 | 101.3 | 103.9 | 105.9 | 109.1 | 106.0 | 107.5 | 106.0 | 149.3 |
| 16000 | 100.8 | 100.9 | 102.3 | 102.6 | 103.6 | 102.6 | 99.5 | 102.0 | 104.4 | 106.5 | 103.7 | 105.4 | 105.3 | 149.1 |
| 20000 | 98.9 | 98.8 | 100.5 | 100.3 | 101.3 | 101.1 | 97.7 | 99.1 | 102.3 | 102.5 | 100.7 | 101.9 | 103.4 | 148.3 |
| 25000 | 93.1 | 95.5 | 96.5 | 97.0 | 98.7 | 97.8 | 94.8 | 94.6 | 98.6 | 100.3 | 98.1 | 97.4 | 98.9 | 147.3 |
| 31500 | 90.8 | 91.9 | 92.8 | 91.8 | 92.1 | 91.7 | 90.8 | 90.3 | 95.2 | 96.3 | 94.5 | 94.0 | 96.4 | 146.2 |
| 40000 | 85.6 | 84.7 | 88.0 | 88.9 | 91.5 | 90.1 | 85.8 | 86.5 | 90.2 | 90.4 | 88.2 | 88.0 | 90.7 | 145.9 |
| 50000 | 82.9 | 81.0 | 84.3 | 84.4 | 83.0 | 82.2 | 80.8 | 78.9 | 86.6 | 84.6 | 82.5 | 83.1 | 85.9 | 144.9 |
| 63000 | 74.9 | 75.2 | 75.7 | 76.8 | 74.3 | 74.5 | 75.1 | 72.9 | 81.3 | 79.4 | 77.5 | 74.2 | 78.5 | 143.6 |
| 80000 | 65.1 | 66.1 | 67.7 | 67.7 | 67.3 | 68.2 | 66.6 | 65.7 | 71.5 | 69.6 | 67.7 | 64.3 | 68.7 | 141.3 |

JASPL 117.6 117.1 117.2 116.3 116.1 116.3 115.1 117.0 121.7 126.1 127.8 129.2 124.6 164.9

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000
FREE JET VELOCITY (FT/SEC) 390.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-29-78 TAPE NO. N313 ALPHA 5859 TAMB 58.10
LOCATION C41 ANECH CH AERO. RDG. ADH218 PAMB 29.5600 RELHUM 12.70

MODEL TEST POINT 0100A 0103A
ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 118.87 M/SEC (390.0 FPS)
FREE-JET SPEED

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-A-MODL X01035

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 69.7 | 71.8 | 73.0 | 72.2 | 73.1 | 74.0 | 73.3 | 74.5 | 80.6 | 89.5 | 92.1 | 94.3 | 85.4 | 167.8 |
| 63 | 71.3 | 72.5 | 73.6 | 72.5 | 74.6 | 75.3 | 74.8 | 76.6 | 83.5 | 91.1 | 93.9 | 95.7 | 85.4 | 169.2 |
| 80 | 71.9 | 73.6 | 75.4 | 75.1 | 76.8 | 77.0 | 76.5 | 78.6 | 86.1 | 92.4 | 95.4 | 96.3 | 85.9 | 170.3 |
| 100 | 71.7 | 75.0 | 76.7 | 76.0 | 77.8 | 78.1 | 77.8 | 80.1 | 87.9 | 93.3 | 95.5 | 95.5 | 85.8 | 170.3 |
| 125 | 75.5 | 75.2 | 77.5 | 77.8 | 78.4 | 79.5 | 79.8 | 81.1 | 88.4 | 92.8 | 95.5 | 94.5 | 84.3 | 169.6 |
| 160 | 77.1 | 77.0 | 78.5 | 78.5 | 79.8 | 80.9 | 80.7 | 82.8 | 89.1 | 93.7 | 95.7 | 93.0 | 85.3 | 170.0 |
| 200 | 81.0 | 82.9 | 81.7 | 80.4 | 81.6 | 82.9 | 81.9 | 83.8 | 90.7 | 94.6 | 95.3 | 93.0 | 84.7 | 170.6 |
| 250 | 89.2 | 88.9 | 87.0 | 84.2 | 84.4 | 82.6 | 82.0 | 84.6 | 90.1 | 95.0 | 95.6 | 93.0 | 85.0 | 171.7 |
| 315 | 87.8 | 89.1 | 90.1 | 89.1 | 90.3 | 87.4 | 84.6 | 85.9 | 91.7 | 95.5 | 95.6 | 93.6 | 84.6 | 172.9 |
| 400 | 85.0 | 87.9 | 90.2 | 90.6 | 89.3 | 90.3 | 87.1 | 86.7 | 92.0 | 95.0 | 93.6 | 90.5 | 82.6 | 172.3 |
| 500 | 82.9 | 84.3 | 85.8 | 87.5 | 85.8 | 87.7 | 87.9 | 87.7 | 91.4 | 94.4 | 91.8 | 87.7 | 80.2 | 171.1 |
| 630 | 81.8 | 83.4 | 85.6 | 84.7 | 85.9 | 87.0 | 87.5 | 89.3 | 91.6 | 92.9 | 89.3 | 85.9 | 78.0 | 170.5 |
| 800 | 80.4 | 82.3 | 84.7 | 85.1 | 84.8 | 87.0 | 85.8 | 88.7 | 90.8 | 90.9 | 87.2 | 83.4 | 75.7 | 169.7 |
| 1000 | 78.6 | 81.0 | 83.9 | 83.9 | 84.4 | 85.4 | 85.1 | 86.5 | 89.5 | 89.6 | 85.4 | 81.7 | 73.4 | 169.0 |
| 1250 | 78.1 | 80.7 | 82.4 | 83.0 | 84.2 | 85.6 | 83.5 | 85.7 | 86.5 | 87.2 | 82.4 | 79.0 | 70.9 | 168.0 |
| 1600 | 75.4 | 79.3 | 82.1 | 82.4 | 83.5 | 83.3 | 81.1 | 83.1 | 83.9 | 85.3 | 79.4 | 76.5 | 67.2 | 167.4 |
| 2000 | 73.2 | 76.5 | 80.0 | 81.6 | 83.3 | 82.5 | 79.1 | 81.0 | 82.1 | 82.1 | 76.2 | 72.8 | 63.5 | 167.2 |
| 2500 | 69.6 | 73.2 | 77.3 | 78.6 | 80.4 | 80.5 | 76.8 | 77.4 | 79.1 | 76.9 | 71.4 | 66.5 | 56.7 | 166.5 |
| 3150 | 60.4 | 67.5 | 71.4 | 73.7 | 76.5 | 75.9 | 72.8 | 71.3 | 73.5 | 72.2 | 65.4 | 57.0 | 43.8 | 165.4 |
| 4000 | 51.9 | 59.1 | 63.8 | 65.2 | 66.9 | 66.8 | 63.8 | 66.3 | 63.5 | 63.5 | 55.6 | 44.7 | 26.7 | 164.4 |
| 5000 | 36.9 | 44.3 | 52.9 | 55.9 | 61.2 | 60.4 | 55.6 | 54.5 | 55.0 | 50.0 | 39.5 | 25.0 | | 164.0 |
| 6300 | 16.5 | 26.5 | 37.0 | 41.7 | 42.7 | 42.7 | 40.5 | 36.1 | 39.4 | 30.0 | 16.1 | | | 163.0 |
| 8000 | | | 7.1 | 14.8 | 15.9 | 17.2 | 16.7 | 10.9 | 12.8 | | | | | 161.7 |
| 10000 | | | | | | | | | | | | | | 159.5 |

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GASPL 94.3 95.6 96.8 96.7 96.9 97.2 95.9 97.3 101.4 104.9 105.4 104.5 95.3 182.9
 PNL 99.7 101.5 103.7 104.0 104.8 104.8 102.8 104.1 107.5 110.0 108.8 106.6 97.5
 PNL 100.5 101.5 104.5 104.7 106.2 106.0 102.8 105.1 108.1 110.0 108.8 106.6 97.5

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-29-78 TAPE NO. N313 ALPHA SB59 TAMB 58.10
 LOCATION C41 ANECH CH AERO. RDG. ADH218 PAMB 29.5600 RELHUM 12.70

MODEL TEST POINT ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE FREE-JET SPEED
 0100A 0103A 118.87 M/SEC (390.0 FPS)

07/19/79 15.714

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-AMODL X01040
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ
50
63
80
100
125
160
200

250 85.3 89.8 89.8 89.9 90.2 92.1 94.7 97.4 99.8 106.7 111.0 117.2 113.9 148.6
315 86.4 88.7 89.7 90.7 92.3 94.4 96.1 97.5 101.4 109.0 112.6 118.6 114.7 150.2
400 88.7 89.9 91.0 91.0 92.1 94.2 95.8 98.0 103.0 112.5 115.2 120.3 114.5 152.0
500 89.0 90.5 92.8 92.6 93.4 96.0 96.9 99.3 103.8 113.9 117.2 121.2 115.1 153.2
630 90.3 92.1 93.6 93.9 95.3 97.6 97.8 101.2 106.1 115.0 118.3 122.0 116.9 154.3
800 93.9 93.6 94.9 95.7 96.3 98.4 99.5 103.4 108.4 115.2 118.6 122.5 116.7 154.7
1000 98.7 98.2 98.5 97.5 97.6 100.0 100.9 104.3 109.7 115.1 117.9 122.6 117.0 154.8
1250 95.0 99.8 101.3 100.9 101.0 102.3 102.7 106.4 111.3 116.4 121.0 125.0 118.4 157.1
1600 97.9 97.5 98.0 98.8 100.4 102.6 103.1 106.5 112.5 116.8 121.3 124.8 117.8 157.1
2000 99.0 99.8 99.3 99.1 99.2 101.0 102.7 106.8 112.3 117.4 119.6 121.8 113.6 155.3
2500 99.7 99.7 100.7 100.5 100.1 102.0 104.1 107.3 112.5 118.1 119.5 119.7 111.2 154.8
3150 100.5 100.6 100.6 101.1 100.4 102.3 103.8 107.8 112.6 117.2 118.4 118.8 109.8 154.1
4000 98.6 99.0 101.0 100.7 101.1 102.2 103.8 108.0 111.5 115.4 116.8 116.4 108.4 152.6
5000 97.4 98.6 100.0 101.0 101.6 103.2 104.1 108.5 110.5 116.2 116.1 115.2 107.4 152.5
6300 95.9 98.6 99.8 100.3 101.5 104.1 104.6 107.8 110.4 115.0 114.5 114.2 106.5 151.8
8000 94.9 98.6 99.2 99.8 101.3 103.2 104.0 106.9 110.2 113.6 112.6 105.6 151.2
10000 92.9 97.0 98.6 99.6 100.7 103.0 103.0 107.1 108.9 112.7 111.9 112.1 104.4 150.7
12500 90.1 94.3 96.4 98.6 100.3 102.0 101.7 104.9 106.3 110.4 110.3 109.4 103.1 149.5
16000 87.0 91.9 95.5 97.4 99.0 101.2 99.9 103.4 105.3 109.3 108.5 106.8 100.9 149.3
20000 81.8 89.6 91.9 94.3 97.5 99.5 96.7 100.2 102.4 105.8 105.6 104.3 99.9 148.2
25000 80.2 86.2 89.3 90.1 94.6 95.7 93.6 95.2 99.6 101.5 101.6 99.7 97.4 146.7
31500 78.2 82.3 86.5 88.9 89.3 89.8 89.5 91.1 96.3 99.0 96.6 94.7 90.4 146.0
40000 73.6 76.8 81.4 83.8 87.7 88.1 84.7 86.4 90.9 94.0 92.7 88.9 86.5 145.5
50000 67.0 72.2 74.4 77.6 79.1 80.8 79.0 79.4 86.7 88.9 86.6 84.0 80.2 144.2
63000 61.0 67.1 68.2 71.0 71.7 72.6 73.9 73.2 81.6 82.3 80.7 79.5 75.5 143.6
80000 55.6 59.0 62.5 65.7 64.7 67.1 65.9 68.1 76.5 77.2 75.3 72.6 68.9 144.9

GASPL 108.8 110.1 111.1 111.5 112.3 114.2 114.9 118.5 122.5 127.7 130.0 133.0 126.7 166.6

TEST DATE 03-29-78 TAPE NO. N313 ALPHA 3859 TAMB 54.32
LOCATION C41 ANECH CH AERO. RDG. ADH216 PAMB 29.5600 RELHUM 29.30

MODEL TEST POINT 0100A ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CH (21.55 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (O. FPS)

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
53.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-AMODL X01040

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PHL

FREQ 50 63 80 100 125 160 200 250 315 400 500 630 800 1000 1250 1600 2000 2500 3150 4000 5000 6300 8000 10000 12500 16000 20000 25000 31500 40000 50000 63000 80000

85.3 89.8 89.8 89.9 90.2 92.1 94.7 97.4 99.8 106.7 111.0 117.2 113.9 148.5
 86.4 88.7 89.7 90.7 92.3 94.4 96.1 97.5 101.4 109.0 112.6 118.6 114.7 150.2
 88.7 89.9 91.0 91.0 92.1 94.2 95.8 96.8 103.0 112.5 115.2 120.3 114.5 152.0
 89.0 90.5 92.8 93.4 96.0 96.9 99.3 103.8 113.9 117.2 121.2 115.1 153.2
 90.3 92.4 93.6 93.9 95.3 97.6 97.8 101.2 106.1 115.0 118.3 122.0 116.9 154.3
 93.9 93.6 94.9 95.7 96.3 98.4 99.5 103.4 108.4 115.2 118.6 122.5 116.7 154.7
 98.7 98.2 98.5 97.5 97.6 100.0 100.9 104.3 109.7 115.1 117.9 122.6 117.0 154.8
 98.0 99.8 101.3 100.9 101.0 102.3 102.7 106.4 111.3 116.4 121.0 125.0 118.4 157.1
 97.9 97.5 98.0 98.8 100.4 102.5 103.1 106.5 112.5 116.8 121.3 124.8 117.8 157.1
 99.0 99.8 99.3 99.1 99.2 101.0 102.7 106.8 112.3 117.4 119.6 121.8 113.6 155.3
 99.7 99.7 100.7 100.5 100.1 102.0 104.1 107.3 112.5 116.1 119.5 119.7 111.2 154.8
 100.5 100.8 100.8 101.1 100.4 102.3 103.9 107.8 112.6 117.2 118.4 118.8 109.8 154.1
 98.6 99.0 101.0 100.7 101.1 102.2 103.8 108.0 111.5 115.4 116.8 116.4 108.4 152.6
 98.8 100.0 101.0 101.6 103.2 104.1 108.5 110.5 116.2 116.1 115.2 107.4 152.5
 98.6 98.6 100.3 101.5 104.1 104.6 107.8 110.4 115.0 114.5 114.2 106.9 151.8
 98.6 99.2 99.8 101.3 103.2 104.0 106.9 110.2 113.6 113.8 112.6 105.6 151.2
 97.0 99.6 100.7 103.0 103.0 103.0 107.1 108.9 112.7 111.9 112.1 104.4 150.7
 94.3 96.4 98.6 100.3 102.0 101.7 104.9 106.3 110.4 110.3 109.4 103.1 149.5
 91.9 95.5 97.4 99.0 101.2 99.9 103.4 105.3 109.3 108.5 106.8 100.9 149.3
 89.6 91.9 94.3 97.5 99.5 96.7 100.2 102.4 105.8 105.6 104.3 98.9 148.2
 86.2 89.3 90.1 94.6 95.7 93.6 95.2 99.6 101.5 101.6 99.7 97.4 146.7
 82.3 86.5 88.9 89.3 89.8 89.5 91.1 96.3 99.0 96.6 94.7 90.4 146.0
 76.8 81.4 83.8 87.7 88.1 84.7 86.4 90.9 94.0 92.7 88.9 86.5 145.5
 72.2 74.4 77.6 79.1 80.8 79.0 79.4 86.7 88.9 86.6 84.0 80.2 144.2
 67.1 68.2 71.0 71.7 72.6 73.9 73.2 81.6 82.3 80.7 79.5 75.5 143.6
 59.0 62.5 65.7 64.7 67.1 65.9 68.1 76.5 77.2 76.3 72.6 68.9 144.9

108.8 110.1 111.1 111.5 112.3 114.2 114.9 118.5 122.5 127.7 130.0 133.0 126.7 166.6

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) FREE JET DIAMETER (IN) 0. 48.00 REFRACTION CORRECTION - YES TURBULANCE CORRECTION - YES

TEST DATE 03-29-78 LOCATION C41 ANECH CH TAPE NO. N313 AERO. RDG. ADH216 ALPHA SB59 PAMB 29.5600 TAMB 54.32 RELHUM 29.30

MODEL TEST POINT 0100A 0104A ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

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07/19/79 15.714

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 98 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-AMODL X01045

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 50 | 67.3 | 70.2 | 72.3 | 73.0 | 74.5 | 76.8 | 78.3 | 80.0 | 84.3 | 92.7 | 93.6 | 96.6 | 97.7 | 170.2 |
| 63 | 67.6 | 70.7 | 74.1 | 74.6 | 75.8 | 78.6 | 79.3 | 81.3 | 85.1 | 94.1 | 95.9 | 97.6 | 98.2 | 171.3 |
| 80 | 68.9 | 72.5 | 74.9 | 75.9 | 77.6 | 80.1 | 80.1 | 83.1 | 87.4 | 95.1 | 96.9 | 98.4 | 99.9 | 172.4 |
| 100 | 72.4 | 73.7 | 76.1 | 77.6 | 78.6 | 80.9 | 81.9 | 85.3 | 89.6 | 95.3 | 97.1 | 98.8 | 99.5 | 172.9 |
| 125 | 77.1 | 78.2 | 79.6 | 79.4 | 79.9 | 82.4 | 83.1 | 86.1 | 90.8 | 95.1 | 96.4 | 98.6 | 99.6 | 172.9 |
| 150 | 74.3 | 79.7 | 82.3 | 82.6 | 83.1 | 84.6 | 84.8 | 88.1 | 92.3 | 96.3 | 99.3 | 100.8 | 90.6 | 175.2 |
| 200 | 75.8 | 77.1 | 78.8 | 80.3 | 82.3 | 84.5 | 85.1 | 88.0 | 93.3 | 96.4 | 99.3 | 100.3 | 89.5 | 175.2 |
| 250 | 76.7 | 79.2 | 79.9 | 80.4 | 80.9 | 83.0 | 84.4 | 88.2 | 92.9 | 96.6 | 97.3 | 97.0 | 84.7 | 175.4 |
| 315 | 76.9 | 78.7 | 81.0 | 81.6 | 83.8 | 85.6 | 85.6 | 88.3 | 92.7 | 97.1 | 96.8 | 94.3 | 81.5 | 172.9 |
| 400 | 77.2 | 79.4 | 80.7 | 81.8 | 83.6 | 85.1 | 85.1 | 88.5 | 92.5 | 95.8 | 95.1 | 92.7 | 79.1 | 172.2 |
| 500 | 74.9 | 77.2 | 80.3 | 81.2 | 82.0 | 83.2 | 84.7 | 88.4 | 91.1 | 93.6 | 93.0 | 89.7 | 76.8 | 170.7 |
| 630 | 73.1 | 76.6 | 79.3 | 81.1 | 82.2 | 84.0 | 84.7 | 88.6 | 89.8 | 94.1 | 91.8 | 87.8 | 74.7 | 170.6 |
| 800 | 71.1 | 76.0 | 78.8 | 80.2 | 81.9 | 84.7 | 85.0 | 87.7 | 89.4 | 92.5 | 89.8 | 86.1 | 73.0 | 169.9 |
| 1000 | 69.7 | 76.8 | 77.9 | 79.5 | 81.6 | 83.7 | 84.3 | 86.6 | 89.9 | 90.8 | 88.6 | 83.8 | 70.6 | 169.3 |
| 1250 | 67.2 | 73.8 | 77.1 | 79.1 | 80.8 | 83.4 | 83.1 | 86.6 | 87.4 | 89.5 | 86.2 | 82.5 | 67.9 | 168.8 |
| 1600 | 63.5 | 70.5 | 74.5 | 77.8 | 80.2 | 82.0 | 81.5 | 84.1 | 84.4 | 86.6 | 83.8 | 78.5 | 64.3 | 167.6 |
| 2000 | 59.5 | 67.5 | 73.1 | 76.3 | 78.6 | 81.1 | 79.6 | 82.3 | 83.0 | 84.9 | 81.0 | 74.2 | 59.1 | 167.5 |
| 2500 | 52.5 | 64.0 | 68.7 | 72.6 | 76.6 | 78.9 | 75.8 | 78.4 | 79.1 | 80.2 | 76.2 | 68.9 | 53.2 | 166.3 |
| 3150 | 47.5 | 58.2 | 64.2 | 66.9 | 72.4 | 73.8 | 71.3 | 73.9 | 74.5 | 73.5 | 68.9 | 59.3 | 42.3 | 164.8 |
| 4000 | 39.2 | 48.6 | 57.6 | 62.3 | 64.1 | 65.0 | 64.3 | 64.6 | 67.4 | 66.3 | 57.7 | 45.4 | 20.8 | 164.1 |
| 5000 | 24.9 | 36.4 | 46.2 | 51.9 | 57.5 | 58.4 | 54.5 | 54.4 | 55.7 | 53.7 | 44.0 | 25.9 | 163.6 | |
| 8300 | 0.5 | 17.7 | 27.2 | 34.8 | 38.8 | 41.3 | 38.7 | 39.5 | 34.3 | 20.1 | | | 162.3 | |
| 8000 | | | | 9.0 | 13.3 | 15.3 | 15.5 | 11.2 | 13.0 | 2.9 | | | 161.7 | |
| 10000 | | | | | | | | | | | | | 163.0 | |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0ASPL | 85.6 | 88.7 | 90.9 | 92.0 | 93.2 | 95.2 | 95.9 | 99.0 | 102.5 | 106.6 | 107.6 | 108.3 | 98.3 | 184.5 |
| PNL | 90.4 | 94.1 | 96.8 | 99.1 | 101.0 | 103.2 | 102.8 | 105.5 | 108.2 | 111.6 | 111.1 | 110.3 | 98.9 | |
| PNLT | 91.5 | 94.1 | 97.3 | 99.1 | 102.4 | 104.4 | 102.6 | 105.6 | 108.8 | 112.3 | 112.2 | 110.3 | 100.1 | |

DIAMETER RATIO 8.081 FREQUENCY SHIFT -9

TEST DATE 03-29-78 TAPE NO. N313 IALPHA 3859 TAMB 54.32
LOCATION C41 ANECH CH AERG. RDG. ADH216 PAMB 29.5600 RELHUM 29.30

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
0100A 0104A 731.5 M (2400.0 FT) SL 9032.2 SQ CH (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)

07/19/79 15.714

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-AMODL X01060
BACKGROUND FJB400-FMODL X05220

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. FWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

600

800

1000

1250

1600

2000

2500

3150

4000

5000

6000

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

CASPL

104.7

105.9

107.3

108.5

110.4

111.2

115.0

119.1

124.2

126.0

124.9

116.3

161.1

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TEST DATE 03-29-78
LOCATION C41 ANECH CH

TAPE NO. N313
AERO. RDG. ADH224

IALPHA 3859
PAMB 29.5600

TAMB 58.46
RELHUM 12.50

MODEL TEST POINT
0100A 0106A

ACOUSTIC RANGE
12.2 M (40.0 FT) ARC

SIZE
139.0 SQ CM (21.55 SQ IN) - MODEL

FREE-JET SPEED
118.87 M/SEC (390.0 FPS)

07/19/79 15.714

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - FJ-400-AMODL X01060

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

60

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 390.00 REFRACTION CORRECTION - YES FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-29-78 TAPE NO. N313 ALPHA 3859 TARB 66.46
LOCATION C41 ANECH CH AERO. RDG. ADH224 PAMB 29.5600 RELHUM 12.50

MODEL TEST POINT 0100A 0106A ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CH (21.55 SQ IN) - MODEL 118.87 M/SEC (390.0 FPS) FREE-JET SPEED

07/19/79 15.714

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-AMODL X01065

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 68.4 | 70.5 | 71.2 | 71.2 | 72.2 | 72.9 | 72.4 | 73.8 | 79.3 | 88.4 | 90.2 | 92.3 | 82.0 | 165.8 |
| 63 | 70.3 | 71.5 | 72.3 | 71.9 | 73.3 | 73.8 | 74.3 | 75.4 | 82.3 | 89.2 | 91.8 | 93.3 | 81.1 | 166.9 |
| 80 | 70.3 | 71.9 | 74.4 | 73.9 | 75.8 | 75.5 | 75.6 | 77.4 | 83.7 | 90.3 | 92.6 | 92.5 | 81.5 | 167.1 |
| 100 | 69.6 | 73.7 | 75.2 | 75.0 | 76.1 | 76.9 | 76.4 | 78.6 | 85.9 | 90.8 | 92.3 | 91.5 | 81.9 | 166.9 |
| 125 | 74.2 | 74.2 | 75.7 | 76.3 | 77.0 | 78.3 | 78.0 | 79.9 | 87.0 | 91.7 | 91.6 | 99.2 | 80.1 | 166.4 |
| 160 | 75.7 | 77.5 | 76.8 | 78.4 | 79.4 | 79.1 | 81.6 | 88.2 | 91.6 | 91.3 | 87.8 | 79.8 | 79.8 | 166.4 |
| 200 | 74.8 | 77.9 | 79.5 | 79.1 | 78.8 | 80.4 | 80.3 | 82.0 | 88.8 | 92.7 | 91.3 | 86.6 | 79.7 | 167.0 |
| 250 | 76.8 | 76.8 | 78.0 | 78.5 | 78.0 | 80.1 | 80.2 | 82.6 | 89.2 | 93.6 | 91.7 | 87.9 | 80.0 | 168.0 |
| 315 | 76.8 | 77.9 | 78.4 | 79.4 | 79.9 | 80.9 | 81.2 | 83.9 | 89.8 | 93.1 | 91.4 | 89.9 | 81.0 | 168.8 |
| 400 | 78.7 | 81.7 | 81.9 | 81.0 | 83.5 | 82.3 | 82.3 | 84.8 | 89.7 | 91.8 | 90.9 | 88.3 | 79.4 | 168.7 |
| 500 | 78.9 | 81.6 | 83.1 | 84.5 | 83.6 | 83.7 | 82.7 | 85.3 | 88.7 | 91.8 | 89.2 | 85.9 | 78.2 | 168.5 |
| 630 | 76.3 | 78.7 | 81.9 | 82.4 | 82.7 | 84.7 | 84.0 | 85.4 | 88.4 | 90.3 | 87.5 | 84.4 | 75.8 | 167.9 |
| 800 | 77.1 | 78.8 | 80.7 | 81.1 | 81.2 | 83.5 | 83.3 | 85.2 | 87.6 | 88.7 | 85.5 | 82.0 | 73.3 | 167.1 |
| 1000 | 75.6 | 78.7 | 81.2 | 80.9 | 81.9 | 82.9 | 82.3 | 84.6 | 86.7 | 87.7 | 83.8 | 80.4 | 71.9 | 166.9 |
| 1250 | 75.4 | 78.4 | 79.9 | 80.8 | 81.7 | 83.1 | 81.6 | 84.0 | 84.4 | 85.7 | 81.0 | 78.6 | 70.2 | 166.3 |
| 1600 | 71.9 | 76.0 | 79.1 | 79.1 | 80.0 | 80.8 | 79.7 | 81.4 | 82.8 | 83.5 | 78.4 | 76.3 | 67.5 | 165.7 |
| 2000 | 67.8 | 72.8 | 76.3 | 77.5 | 80.1 | 80.8 | 78.0 | 80.0 | 81.0 | 80.5 | 75.0 | 72.3 | 62.8 | 165.3 |
| 2500 | 66.6 | 71.5 | 75.3 | 76.3 | 77.9 | 78.2 | 75.2 | 76.7 | 76.6 | 73.9 | 67.6 | 64.2 | 54.9 | 164.2 |
| 3150 | 57.9 | 66.0 | 69.6 | 71.5 | 74.2 | 74.1 | 70.3 | 69.0 | 73.0 | 71.3 | 64.2 | 57.2 | 44.2 | 164.1 |
| 4000 | 49.9 | 58.4 | 62.6 | 63.7 | 65.4 | 65.6 | 64.1 | 63.6 | 65.3 | 61.6 | 53.5 | 43.2 | 25.5 | 163.0 |
| 5000 | 35.7 | 44.1 | 51.4 | 55.7 | 59.2 | 59.2 | 53.9 | 53.8 | 53.9 | 47.2 | 37.7 | 24.5 | | 162.5 |
| 6300 | 15.7 | 26.2 | 36.3 | 40.4 | 41.5 | 41.7 | 39.1 | 36.2 | 37.7 | 26.9 | 14.4 | | | 161.6 |
| 8000 | | | 6.6 | 14.3 | 14.9 | 16.2 | 16.0 | 11.0 | 11.0 | | | | | 160.8 |
| 10000 | | | | | | | | | | | | | | 158.7 |

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QASPL 87.6 69.6 91.6 91.9 92.6 93.6 92.9 95.0 99.4 102.6 102.2 100.9 91.3 190.0
 PNLT 93.6 96.7 99.4 100.1 101.4 102.2 100.5 102.3 105.4 107.7 105.8 103.4 94.1
 PNLT 93.6 96.7 100.2 100.7 102.7 103.4 100.5 102.3 106.0 107.7 105.8 103.4 94.1

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-29-78 TAPE NO. N313 ALPHA SB59 TAMB 58.46
 LOCATION C41 ANECH CH AERO. RDG. ADH224 PAMB 29.5600 RELHUM 12.50

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
 0100A 0106A 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 118.87 M/SEC (390.0 FPS)

07/19/79 15.714

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
50.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-AMODL X01070
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250 77.5 83.3 82.1 82.6 83.5 85.3 87.7 89.9 91.6 97.9 101.8 108.2 104.9 139.9
315 79.4 81.7 82.9 84.2 85.8 87.7 87.8 91.0 93.9 99.3 103.4 109.6 106.5 141.3
400 80.9 83.2 84.2 84.3 85.1 87.5 88.3 91.0 95.0 103.3 105.4 111.3 107.0 143.1
500 81.2 84.3 85.8 85.3 86.4 88.5 89.2 92.1 96.1 103.6 106.0 111.2 106.8 143.2
630 82.1 84.9 86.7 86.7 90.0 89.9 90.3 93.7 97.4 103.7 105.6 110.5 105.4 142.9
800 84.9 86.7 87.4 89.0 88.6 90.9 91.6 95.2 98.9 104.3 105.1 108.6 104.7 142.1
1000 87.5 87.3 89.3 88.8 89.9 92.3 92.4 96.6 100.1 103.4 104.0 106.4 102.3 141.0
1250 86.1 89.2 90.2 90.7 91.6 92.9 93.3 97.0 99.7 103.8 104.1 106.1 100.7 141.0
1600 87.2 88.9 89.9 90.4 91.7 93.6 94.2 97.4 100.4 103.7 104.2 105.6 100.6 141.1
2000 87.2 90.0 90.5 90.5 90.9 93.2 93.6 98.0 100.8 103.6 103.8 105.0 99.5 140.9
2500 86.9 90.2 91.5 91.2 92.1 93.7 95.1 98.2 100.0 103.9 103.0 105.2 100.2 141.0
3150 87.5 90.3 90.9 91.6 92.4 94.5 94.9 98.1 101.1 102.5 102.9 106.3 102.0 141.3
4000 88.4 89.3 91.0 91.3 92.1 93.7 94.8 98.8 100.8 101.7 101.6 106.7 102.9 141.2
5000 88.1 90.2 91.0 91.5 92.3 94.6 95.2 98.2 99.8 102.2 101.3 107.1 103.1 141.5
6300 86.9 90.1 91.8 91.8 92.5 94.4 95.1 98.3 100.2 101.8 101.0 107.3 103.2 141.7
8000 85.3 88.8 90.2 91.2 92.0 94.4 94.2 97.8 99.6 100.5 100.2 105.8 102.1 141.1
10000 82.3 87.5 89.4 90.2 91.8 94.4 93.1 97.4 98.2 99.6 98.9 104.7 100.5 140.5
12500 78.6 85.4 87.5 88.8 90.3 92.4 91.9 95.3 96.1 97.6 96.4 101.9 97.9 139.1
16000 76.1 83.5 86.1 87.3 89.5 91.0 89.7 93.3 94.4 95.9 94.1 98.6 95.0 138.3
20000 71.1 80.8 82.3 84.4 88.4 89.5 87.2 90.3 91.5 92.3 90.6 95.0 92.0 137.0
25000 69.4 77.7 79.2 80.2 84.8 86.4 83.5 85.3 88.5 87.3 86.8 90.2 88.8 135.4
31500 68.3 73.0 76.7 79.5 79.5 80.6 79.7 82.5 85.0 85.6 83.6 84.2 83.6 134.8
40000 64.3 67.8 71.9 74.3 77.8 79.2 74.3 77.1 79.4 79.9 78.5 79.5 78.7 134.2
50000 57.9 63.1 65.0 68.4 70.4 72.1 70.0 70.8 74.3 73.7 72.3 73.8 72.2 132.5
63000 52.9 57.9 59.3 62.4 62.7 64.1 65.1 64.3 69.9 66.5 66.1 67.8 67.1 131.8
80000 47.4 50.0 53.3 57.2 55.4 57.8 57.1 58.6 63.0 59.4 60.9 60.3 59.5 131.9

CASPL 98.1 100.7 102.0 102.5 103.6 105.5 105.8 109.5 111.7 115.1 115.9 120.4 116.3 154.4

TEST DATE 03-29-78
LOCATION C41 ANECH CH

TAPE NO. N313
AERO. RDG. ADH227

IALPHA SB59
PAMB 29.5600

TAMB 54.14
RELHUM 14.30

MODEL TEST POINT
0100A 0107A

ACOUSTIC RANGE
12.2 M (40.0 FT) ARC

SIZE
139.0 SQ CM (21.55 SQ IN) - MODEL

FREE-JET SPEED
0. M/SEC (0. FPS)

FLIGHT TRANSFORMED MODEL, SOUND PRESSURE LEVELS

IDENTIFICATION - FJ-ZER-AMODL X01070

ANGLES MEASURED FROM INLET. DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|--------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 77.5 | 83.3 | 82.1 | 82.6 | 83.5 | 85.3 | 87.7 | 89.9 | 91.6 | 97.9 | 101.6 | 108.2 | 104.9 | 139.9 |
| 315 | 79.4 | 81.7 | 82.9 | 84.2 | 85.6 | 87.7 | 87.6 | 91.0 | 93.9 | 99.3 | 103.4 | 109.6 | 106.5 | 141.3 |
| 400 | 80.9 | 83.2 | 84.2 | 84.3 | 85.1 | 87.5 | 88.3 | 91.0 | 95.0 | 103.3 | 109.4 | 111.3 | 107.0 | 143.1 |
| 500 | 81.2 | 84.3 | 85.8 | 85.3 | 86.4 | 88.5 | 89.2 | 92.1 | 96.1 | 103.6 | 106.0 | 111.2 | 106.8 | 143.2 |
| 630 | 82.1 | 84.9 | 86.7 | 86.7 | 88.0 | 89.9 | 90.3 | 93.7 | 97.4 | 103.7 | 105.6 | 110.5 | 106.4 | 142.9 |
| 800 | 84.9 | 85.7 | 87.4 | 89.0 | 88.6 | 90.9 | 91.6 | 95.2 | 98.9 | 104.3 | 105.1 | 108.6 | 104.7 | 142.1 |
| 1000 | 87.5 | 87.3 | 89.3 | 88.8 | 89.9 | 92.3 | 92.4 | 96.6 | 100.1 | 103.4 | 104.0 | 106.4 | 102.3 | 141.0 |
| 1250 | 86.1 | 89.2 | 90.2 | 90.7 | 91.6 | 92.9 | 93.3 | 97.0 | 99.7 | 103.8 | 104.1 | 106.1 | 100.7 | 141.0 |
| 1600 | 87.2 | 88.9 | 89.9 | 90.4 | 91.7 | 93.6 | 94.2 | 97.4 | 100.4 | 103.7 | 104.2 | 105.6 | 100.6 | 141.1 |
| 2000 | 87.2 | 90.0 | 90.6 | 90.5 | 90.9 | 93.2 | 93.8 | 98.0 | 100.8 | 103.6 | 103.8 | 106.0 | 99.5 | 140.9 |
| 2500 | 86.9 | 90.2 | 91.5 | 91.2 | 92.1 | 93.7 | 95.1 | 98.2 | 100.0 | 103.9 | 103.0 | 105.2 | 100.2 | 141.0 |
| 3150 | 87.5 | 90.3 | 90.9 | 91.6 | 92.4 | 94.5 | 94.9 | 99.1 | 101.1 | 102.5 | 102.9 | 106.3 | 102.0 | 141.3 |
| 4000 | 88.4 | 89.3 | 91.0 | 91.3 | 92.1 | 93.7 | 94.8 | 98.8 | 100.8 | 101.7 | 101.6 | 106.7 | 102.9 | 141.2 |
| 5000 | 88.1 | 90.2 | 91.0 | 91.5 | 92.3 | 94.6 | 95.2 | 99.2 | 99.8 | 102.2 | 101.3 | 107.1 | 103.1 | 141.5 |
| 6300 | 86.9 | 90.1 | 91.6 | 91.8 | 92.5 | 94.4 | 95.1 | 98.3 | 100.2 | 101.8 | 101.0 | 107.3 | 103.2 | 141.7 |
| 8000 | 85.3 | 88.8 | 90.2 | 91.2 | 92.0 | 94.4 | 94.2 | 97.8 | 99.6 | 100.5 | 100.2 | 105.8 | 102.1 | 141.1 |
| 10000 | 82.3 | 87.5 | 89.4 | 90.2 | 91.8 | 94.4 | 93.1 | 97.4 | 98.2 | 99.6 | 98.9 | 104.7 | 100.5 | 140.5 |
| 12500 | 78.6 | 85.4 | 87.5 | 88.8 | 90.3 | 92.4 | 91.9 | 95.3 | 96.1 | 97.6 | 96.4 | 101.9 | 97.9 | 139.1 |
| 16000 | 76.1 | 83.5 | 86.1 | 87.3 | 89.5 | 91.0 | 89.7 | 93.3 | 94.4 | 95.9 | 94.1 | 98.6 | 95.0 | 138.3 |
| 20000 | 71.1 | 80.8 | 82.3 | 84.4 | 88.4 | 89.5 | 87.2 | 90.3 | 91.5 | 92.3 | 90.6 | 95.0 | 92.0 | 137.0 |
| 25000 | 69.4 | 77.7 | 79.2 | 80.2 | 84.8 | 86.4 | 83.5 | 85.3 | 88.5 | 87.3 | 86.8 | 90.2 | 88.9 | 135.4 |
| 31500 | 68.3 | 73.0 | 76.7 | 79.5 | 79.5 | 80.5 | 79.7 | 82.5 | 85.0 | 85.6 | 83.6 | 84.2 | 83.6 | 134.6 |
| 40000 | 64.3 | 67.8 | 71.9 | 74.3 | 77.8 | 79.2 | 74.3 | 77.1 | 79.4 | 79.9 | 78.5 | 79.5 | 78.7 | 134.2 |
| 50000 | 57.9 | 63.1 | 65.0 | 68.4 | 70.4 | 72.1 | 70.0 | 70.8 | 74.3 | 73.7 | 72.3 | 73.8 | 72.2 | 132.5 |
| 63000 | 52.9 | 57.9 | 59.3 | 62.4 | 62.7 | 64.1 | 65.1 | 64.3 | 69.9 | 68.5 | 66.1 | 67.8 | 67.1 | 131.8 |
| 80000 | 47.4 | 50.0 | 53.3 | 57.2 | 55.4 | 57.6 | 57.1 | 58.6 | 63.0 | 59.4 | 60.9 | 60.3 | 59.5 | 131.9 |
| 100000 | 98.1 | 100.7 | 102.0 | 102.5 | 103.6 | 105.5 | 105.8 | 109.5 | 111.7 | 115.1 | 115.9 | 120.4 | 116.3 | 154.4 |

| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | TURBULANCE CORRECTION - YES |
| | 0. | 48.00 |

| TEST DATE | 03-29-76 | TAPE NO. | N313 | ALPHA | SB59 | TAM9 | 54.14 |
|-----------|--------------|------------|--------|-------|---------|-------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH227 | PAM9 | 29.5600 | RELUM | 14.30 |

| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
|-------|------------|-------------------|----------------------------|--------------------|
| 0100A | 0107A | 12.2 M (40.0 FT) | 139.0 SQ CM (21.55 SQ IN) | 0. M/SEC (0. FPS) |

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OF POOR QUALITY

07/19/79 15.714

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-AMODL X01075

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 59.6 | 63.4 | 65.5 | 66.3 | 67.5 | 70.0 | 70.6 | 73.0 | 76.3 | 83.5 | 84.1 | 87.8 | 80.2 | 161.2 |
| 63 | 59.9 | 64.5 | 67.1 | 67.3 | 68.8 | 71.1 | 71.6 | 74.1 | 77.3 | 83.6 | 84.7 | 87.6 | 79.9 | 161.3 |
| 80 | 60.7 | 65.0 | 67.9 | 68.6 | 72.4 | 72.4 | 72.7 | 75.6 | 78.6 | 83.9 | 84.2 | 86.9 | 79.4 | 161.0 |
| 100 | 63.4 | 65.8 | 68.6 | 70.9 | 73.4 | 73.4 | 73.9 | 77.1 | 80.1 | 84.4 | 83.7 | 84.9 | 77.6 | 160.2 |
| 125 | 65.9 | 67.3 | 70.4 | 70.7 | 72.2 | 74.7 | 74.7 | 78.4 | 81.2 | 83.4 | 82.4 | 82.6 | 74.9 | 159.2 |
| 160 | 64.3 | 69.0 | 71.1 | 72.4 | 73.7 | 75.2 | 75.4 | 78.7 | 80.6 | 83.6 | 82.4 | 81.9 | 72.9 | 159.2 |
| 200 | 65.2 | 68.5 | 70.7 | 71.9 | 73.7 | 75.7 | 76.2 | 78.9 | 81.2 | 83.4 | 82.1 | 81.2 | 72.4 | 159.2 |
| 250 | 64.8 | 69.4 | 71.1 | 71.8 | 72.6 | 75.1 | 75.6 | 79.3 | 81.3 | 83.0 | 81.5 | 80.1 | 70.6 | 159.0 |
| 315 | 64.1 | 69.2 | 71.7 | 72.3 | 73.6 | 75.3 | 76.6 | 79.3 | 80.2 | 82.9 | 80.3 | 79.8 | 70.5 | 159.1 |
| 400 | 64.2 | 69.0 | 70.8 | 72.3 | 73.6 | 75.9 | 76.1 | 79.8 | 81.0 | 81.1 | 79.6 | 80.2 | 71.3 | 159.5 |
| 500 | 64.6 | 67.5 | 70.6 | 71.7 | 73.0 | 74.8 | 75.7 | 79.2 | 80.4 | 80.0 | 77.8 | 80.0 | 71.3 | 159.3 |
| 630 | 63.8 | 68.1 | 70.2 | 71.6 | 72.9 | 75.4 | 75.9 | 79.3 | 79.0 | 80.0 | 77.0 | 79.7 | 70.4 | 159.6 |
| 800 | 62.2 | 67.5 | 70.5 | 71.7 | 72.9 | 75.0 | 75.6 | 78.2 | 79.1 | 79.2 | 76.3 | 79.1 | 69.3 | 159.8 |
| 1000 | 60.2 | 65.9 | 68.9 | 70.9 | 72.3 | 74.9 | 74.5 | 77.5 | 78.3 | 77.7 | 75.1 | 77.1 | 67.1 | 159.2 |
| 1250 | 56.6 | 64.3 | 67.8 | 69.7 | 71.9 | 74.7 | 73.2 | 76.9 | 76.6 | 76.4 | 73.2 | 75.1 | 64.1 | 158.7 |
| 1600 | 52.0 | 61.6 | 65.5 | 68.0 | 70.1 | 72.5 | 71.7 | 74.5 | 74.2 | 73.8 | 69.9 | 71.0 | 59.0 | 157.2 |
| 2000 | 48.6 | 59.1 | 63.7 | 66.3 | 69.2 | 70.9 | 69.4 | 72.3 | 72.1 | 71.5 | 66.6 | 66.0 | 53.2 | 156.4 |
| 2500 | 41.8 | 55.2 | 59.1 | 62.7 | 67.5 | 68.9 | 66.3 | 68.5 | 68.3 | 66.7 | 61.3 | 59.6 | 45.2 | 155.2 |
| 3150 | 36.8 | 49.6 | 54.1 | 56.9 | 62.5 | 64.5 | 61.2 | 62.0 | 63.4 | 59.3 | 54.1 | 49.8 | 33.6 | 153.6 |
| 4000 | 29.3 | 40.2 | 47.8 | 53.0 | 54.3 | 55.7 | 54.5 | 56.0 | 56.1 | 52.8 | 44.7 | 38.0 | 13.9 | 152.9 |
| 5000 | 15.6 | 27.4 | 36.7 | 42.3 | 47.6 | 49.6 | 44.1 | 45.1 | 44.2 | 39.6 | 29.8 | 16.5 | 152.4 | |
| 6300 | | 8.6 | 17.8 | 25.7 | 30.0 | 32.6 | 29.7 | 28.0 | 27.1 | 19.1 | 5.9 | | 150.6 | |
| 8000 | | | | 0.4 | 4.2 | 6.8 | 6.7 | 2.3 | 1.4 | | | | 149.9 | |
| 10000 | | | | | | | | | | | | | 150.1 | |

ORIGINAL PAGE 13
OF POOR QUALITY

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| GASPL | 75.1 | 79.3 | 81.8 | 83.1 | 84.6 | 86.7 | 86.9 | 90.1 | 91.6 | 94.2 | 93.3 | 95.0 | 86.9 | 172.2 |
| PNL | 78.7 | 84.3 | 87.4 | 89.5 | 92.0 | 93.9 | 93.2 | 96.1 | 97.1 | 98.1 | 95.8 | 96.6 | 87.0 | |
| PNLT | 78.7 | 84.3 | 87.4 | 89.5 | 93.2 | 95.1 | 93.2 | 96.1 | 97.1 | 98.1 | 96.8 | 96.6 | 87.0 | |

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-29-78 TAPE NO. N313 ALPHA SB59 TAMB 54.14
LOCATION C41 ANECH CH AERG. RDG. ADH227 PAMB 29.5600 RELHUM 14.30

MODEL TEST POINT ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE FREE-JET SPEED
0100A 0107A 0. M/SEC (O. FPS)

07/19/79 15.714

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-AMODL X01080
BACKGROUND FJB300-FMODL X05230

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. FWL

FREQ

50

63

80

100

125

150

200

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 73.1 | 77.5 | 77.2 | 78.0 | 78.6 | 80.0 | 83.1 | 85.1 | 87.0 | 92.9 | 97.3 | 104.0 | 100.9 | 135.5 |
| 315 | 74.3 | 77.3 | 79.2 | 80.0 | 82.4 | 83.0 | 85.4 | 88.7 | 95.0 | 98.6 | 104.8 | 101.0 | 136.4 | |
| 400 | 76.1 | 77.7 | 78.9 | 80.0 | 82.9 | 83.5 | 86.2 | 89.9 | 97.8 | 100.9 | 106.1 | 99.0 | 137.7 | |
| 500 | 76.4 | 78.7 | 81.3 | 80.8 | 81.6 | 83.7 | 84.8 | 86.8 | 90.0 | 98.6 | 101.2 | 104.9 | 95.8 | 137.2 |
| 630 | 79.6 | 81.4 | 81.9 | 85.0 | 84.9 | 85.7 | 88.9 | 92.1 | 99.2 | 101.3 | 103.0 | 91.9 | 136.6 | |
| 800 | 79.3 | 79.9 | 82.4 | 83.3 | 86.4 | 87.3 | 88.7 | 94.2 | 100.0 | 100.9 | 100.1 | 87.7 | 136.1 | |
| 1000 | 81.2 | 80.7 | 83.3 | 83.8 | 85.1 | 87.5 | 88.9 | 92.0 | 95.3 | 99.8 | 100.0 | 97.4 | 84.5 | 135.7 |
| 1250 | 80.1 | 83.4 | 85.1 | 85.9 | 86.5 | 88.4 | 90.0 | 92.9 | 95.1 | 100.0 | 99.6 | 95.8 | 83.9 | 135.6 |
| 1600 | 82.7 | 83.5 | 84.9 | 85.8 | 87.4 | 89.3 | 90.6 | 93.6 | 96.0 | 99.9 | 99.3 | 95.1 | 83.6 | 135.8 |
| 2000 | 82.1 | 83.1 | 84.9 | 85.4 | 86.5 | 89.1 | 90.7 | 93.9 | 96.7 | 100.0 | 98.7 | 93.9 | 83.9 | 135.7 |
| 2500 | 82.5 | 84.1 | 86.4 | 87.1 | 87.9 | 89.3 | 91.4 | 94.6 | 96.6 | 100.5 | 97.9 | 94.1 | 83.1 | 136.0 |
| 3150 | 83.1 | 84.7 | 86.0 | 87.7 | 88.8 | 90.9 | 92.0 | 95.5 | 97.5 | 98.4 | 97.0 | 93.9 | 82.7 | 135.7 |
| 4000 | 83.6 | 84.7 | 86.2 | 87.4 | 88.5 | 90.8 | 92.2 | 95.4 | 96.5 | 98.1 | 96.5 | 92.4 | 82.1 | 135.4 |
| 5000 | 85.6 | 86.2 | 88.0 | 88.9 | 89.2 | 91.6 | 93.2 | 96.2 | 96.7 | 98.7 | 96.3 | 92.1 | 82.1 | 136.1 |
| 6300 | 85.3 | 86.7 | 88.0 | 88.9 | 89.9 | 91.7 | 92.7 | 95.9 | 97.3 | 98.7 | 95.6 | 92.9 | 83.8 | 136.3 |
| 8000 | 84.1 | 86.1 | 86.7 | 88.8 | 90.0 | 92.2 | 93.0 | 95.1 | 97.2 | 98.4 | 96.0 | 93.6 | 83.8 | 136.6 |
| 10000 | 83.4 | 84.9 | 86.6 | 87.3 | 90.4 | 92.0 | 91.7 | 95.0 | 96.1 | 98.6 | 95.6 | 93.6 | 84.4 | 136.8 |
| 12500 | 80.8 | 83.7 | 84.8 | 86.3 | 88.6 | 90.5 | 90.4 | 93.3 | 94.2 | 96.2 | 93.2 | 92.4 | 82.8 | 135.7 |
| 16000 | 79.0 | 81.7 | 84.3 | 85.7 | 87.9 | 90.1 | 88.8 | 92.2 | 92.6 | 94.9 | 90.6 | 90.0 | 81.6 | 135.7 |
| 20000 | 74.0 | 79.1 | 80.6 | 82.6 | 86.9 | 88.2 | 86.3 | 88.7 | 90.1 | 91.1 | 87.1 | 87.2 | 79.4 | 134.6 |
| 25000 | 72.9 | 76.2 | 77.5 | 79.5 | 83.3 | 84.9 | 83.0 | 84.5 | 87.4 | 86.0 | 83.4 | 82.4 | 77.4 | 133.3 |
| 31500 | 70.7 | 71.9 | 75.3 | 77.8 | 78.5 | 79.3 | 78.5 | 80.6 | 83.6 | 83.6 | 79.7 | 77.5 | 71.8 | 132.6 |
| 40000 | 66.3 | 65.9 | 70.5 | 72.9 | 76.6 | 77.0 | 73.6 | 75.7 | 77.8 | 76.9 | 74.6 | 71.8 | 67.5 | 131.8 |
| 50000 | 60.1 | 62.1 | 64.2 | 67.0 | 69.7 | 70.6 | 69.6 | 68.6 | 72.7 | 69.9 | 68.0 | 66.3 | 60.9 | 130.2 |
| 63000 | 55.4 | 56.8 | 57.7 | 60.9 | 61.2 | 62.6 | 64.4 | 62.8 | 67.3 | 62.0 | 60.5 | 59.8 | 54.8 | 129.0 |
| 80000 | 49.7 | 48.9 | 52.2 | 55.8 | 54.2 | 56.1 | 55.9 | 56.4 | 60.4 | 54.9 | 54.1 | 50.6 | 46.7 | 129.0 |
| QASPL | 94.5 | 96.2 | 97.8 | 98.9 | 100.4 | 102.3 | 103.1 | 106.2 | 108.0 | 111.4 | 111.3 | 112.8 | 106.2 | 149.5 |

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TEST DATE 03-29-78 TAPE NO. N313 ALPHA SB59 TAMB 52.34
LOCATION C41 ANECH CH AERO. RDG. ADH233 PAMB 29.5800 RELHUM 21.10

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
0100A 0108A 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 88.39 M/SEC (290.0 FPS)

07/19/79 15.714

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. S/D. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-AMODL X01080

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | 78.4 | 81.3 | 80.5 | 80.3 | 79.7 | 80.0 | 81.7 | 82.4 | 86.0 | 91.7 | 94.9 | 101.4 | 98.8 | 133.3 |
| 63 | 78.4 | 81.6 | 80.5 | 81.6 | 81.2 | 82.6 | 81.9 | 83.3 | 88.2 | 95.6 | 98.3 | 104.0 | 98.7 | 135.7 |
| 80 | 79.7 | 81.6 | 81.4 | 81.4 | 81.3 | 83.0 | 82.9 | 84.7 | 88.6 | 97.0 | 99.6 | 104.3 | 97.7 | 136.3 |
| 100 | 81.5 | 82.2 | 82.4 | 83.3 | 82.9 | 83.9 | 84.0 | 85.5 | 90.8 | 97.6 | 99.9 | 103.1 | 95.4 | 135.9 |
| 125 | 81.9 | 83.3 | 84.8 | 84.4 | 86.4 | 85.1 | 85.0 | 87.4 | 92.7 | 98.3 | 99.4 | 100.6 | 92.8 | 135.2 |
| 160 | 83.3 | 84.2 | 84.9 | 86.2 | 84.7 | 86.7 | 86.5 | 89.0 | 94.0 | 98.2 | 98.7 | 98.5 | 91.1 | 134.8 |
| 200 | 84.8 | 84.5 | 86.0 | 86.4 | 86.6 | 87.8 | 88.1 | 90.3 | 93.8 | 98.3 | 98.2 | 98.6 | 90.0 | 134.5 |
| 250 | 86.6 | 85.3 | 86.9 | 88.5 | 88.0 | 88.8 | 89.3 | 91.2 | 94.9 | 98.3 | 98.0 | 95.9 | 89.5 | 134.9 |
| 315 | 85.5 | 87.9 | 88.8 | 86.5 | 89.0 | 89.8 | 90.1 | 91.9 | 95.6 | 98.6 | 97.6 | 95.0 | 90.0 | 135.2 |
| 400 | 86.1 | 88.5 | 88.2 | 88.2 | 89.8 | 90.3 | 92.5 | 95.8 | 99.3 | 97.0 | 95.4 | 95.4 | 89.4 | 135.4 |
| 500 | 87.5 | 87.7 | 88.6 | 90.0 | 89.8 | 90.1 | 91.2 | 93.3 | 97.0 | 97.6 | 96.5 | 89.4 | 89.4 | 135.4 |
| 630 | 87.9 | 88.7 | 90.1 | 90.7 | 90.6 | 92.0 | 92.1 | 94.5 | 96.4 | 97.7 | 96.3 | 94.5 | 89.3 | 135.7 |
| 800 | 88.5 | 89.3 | 89.8 | 90.6 | 90.7 | 92.2 | 92.7 | 94.8 | 97.2 | 98.8 | 96.6 | 94.7 | 89.8 | 136.3 |
| 1000 | 88.9 | 89.3 | 90.1 | 92.3 | 91.8 | 93.3 | 94.1 | 96.0 | 98.3 | 99.4 | 96.7 | 96.1 | 92.2 | 137.4 |
| 1250 | 90.8 | 90.8 | 91.9 | 92.5 | 92.8 | 93.9 | 94.0 | 96.2 | 98.8 | 99.6 | 97.4 | 97.2 | 92.4 | 138.2 |
| 1600 | 90.3 | 91.3 | 91.9 | 93.6 | 93.8 | 94.9 | 94.9 | 96.0 | 98.0 | 100.1 | 97.4 | 97.5 | 93.6 | 138.8 |
| 2000 | 90.9 | 92.2 | 91.9 | 92.8 | 94.4 | 95.0 | 93.8 | 96.0 | 96.7 | 98.3 | 95.7 | 97.3 | 93.2 | 138.6 |
| 2500 | 88.9 | 90.8 | 91.6 | 91.3 | 92.6 | 93.5 | 92.7 | 94.5 | 95.8 | 97.7 | 93.7 | 95.6 | 92.9 | 138.3 |
| 3150 | 86.8 | 89.0 | 89.4 | 90.7 | 91.9 | 93.1 | 91.2 | 93.6 | 94.0 | 94.8 | 91.1 | 93.8 | 91.6 | 138.0 |
| 4000 | 84.6 | 86.6 | 88.4 | 87.6 | 90.8 | 91.2 | 88.8 | 90.4 | 92.3 | 90.9 | 88.7 | 90.2 | 90.6 | 137.4 |
| 5000 | 79.0 | 83.4 | 84.2 | 84.4 | 87.3 | 87.9 | 85.5 | 86.5 | 88.5 | 88.1 | 84.5 | 84.7 | 84.6 | 136.0 |
| 6300 | 77.1 | 79.8 | 80.3 | 82.8 | 82.5 | 82.3 | 80.8 | 81.9 | 84.4 | 83.4 | 81.7 | 81.4 | 82.6 | 135.1 |
| 8000 | 74.1 | 74.6 | 77.2 | 77.9 | 80.6 | 80.0 | 76.2 | 79.8 | 77.0 | 75.5 | 76.5 | 76.6 | 76.6 | 135.0 |
| 10000 | 69.3 | 68.2 | 72.1 | 72.0 | 73.6 | 73.6 | 72.2 | 70.6 | 75.5 | 70.1 | 69.1 | 71.1 | 71.6 | 133.6 |
| 12500 | 62.2 | 63.4 | 64.8 | 65.1 | 64.8 | 65.6 | 67.0 | 64.9 | 69.3 | 63.5 | 62.0 | 62.0 | 63.8 | 132.1 |
| 16000 | 54.0 | 55.1 | 55.6 | 60.8 | 58.2 | 59.1 | 56.2 | 57.9 | 59.5 | 53.7 | 53.2 | 52.2 | 54.0 | 131.1 |
| 20000 | 100.2 | 101.2 | 101.9 | 102.7 | 103.2 | 104.2 | 104.0 | 105.9 | 108.4 | 110.9 | 110.3 | 112.0 | 106.7 | 150.2 |

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 290.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-29-78 TAPE NO. N313 ALPHA 3859 TAMB 52.34
LOCATION C41 ANECH CH AERO. RDG. ADH233 PAMB 29.5800 RELHUM 21.10

MODEL TEST POINT 0100A 0108A ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 86.39 M/SEC (290.0 FPS) FREE-JET SPEED

07/19/79 15.714

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-A-MODL X01085

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 56.4 | 62.1 | 63.1 | 63.4 | 63.7 | 65.6 | 65.3 | 66.7 | 70.1 | 77.2 | 78.3 | 80.7 | 70.8 | 154.4 |
| 63 | 60.2 | 63.4 | 63.7 | 65.2 | 65.3 | 66.4 | 66.4 | 67.5 | 72.0 | 77.8 | 78.5 | 79.5 | 68.4 | 154.0 |
| 80 | 60.5 | 63.4 | 66.0 | 66.3 | 68.7 | 67.6 | 67.4 | 69.3 | 74.0 | 78.4 | 78.0 | 77.0 | 65.8 | 153.4 |
| 100 | 61.8 | 64.2 | 66.1 | 68.1 | 67.0 | 69.1 | 68.8 | 70.9 | 75.1 | 78.3 | 77.2 | 74.8 | 63.9 | 152.9 |
| 125 | 63.2 | 64.5 | 67.1 | 68.2 | 68.8 | 70.2 | 70.4 | 72.1 | 74.9 | 78.3 | 76.6 | 72.7 | 62.6 | 152.7 |
| 160 | 64.8 | 65.1 | 67.8 | 70.2 | 70.1 | 71.0 | 71.4 | 72.9 | 75.8 | 78.2 | 76.2 | 71.8 | 61.7 | 153.0 |
| 200 | 63.4 | 67.6 | 69.5 | 70.0 | 71.0 | 71.9 | 72.0 | 73.5 | 76.4 | 78.3 | 75.5 | 70.5 | 61.8 | 153.3 |
| 250 | 65.7 | 67.5 | 69.0 | 69.5 | 70.0 | 71.7 | 72.1 | 73.8 | 76.4 | 78.7 | 74.6 | 70.5 | 60.6 | 153.5 |
| 315 | 64.7 | 66.8 | 68.9 | 71.0 | 71.3 | 71.8 | 72.7 | 74.4 | 77.3 | 76.6 | 73.7 | 70.2 | 59.7 | 153.5 |
| 400 | 64.6 | 67.3 | 70.0 | 71.4 | 72.0 | 73.3 | 73.3 | 75.2 | 76.3 | 76.3 | 73.1 | 68.4 | 58.6 | 153.8 |
| 500 | 64.7 | 67.6 | 69.3 | 71.0 | 71.7 | 73.3 | 73.6 | 75.3 | 76.7 | 77.0 | 72.9 | 68.0 | 58.1 | 154.5 |
| 630 | 64.6 | 67.2 | 69.3 | 72.5 | 72.4 | 74.1 | 74.7 | 76.2 | 77.6 | 77.2 | 72.4 | 68.7 | 59.4 | 155.5 |
| 800 | 66.0 | 68.3 | 70.8 | 72.4 | 73.2 | 74.5 | 74.1 | 76.1 | 77.8 | 77.1 | 72.7 | 69.1 | 58.6 | 156.3 |
| 1000 | 65.1 | 68.4 | 70.6 | 73.3 | 74.0 | 75.3 | 75.1 | 76.7 | 77.3 | 77.3 | 72.2 | 68.8 | 58.6 | 156.9 |
| 1250 | 65.2 | 69.0 | 70.4 | 72.3 | 74.5 | 75.4 | 73.9 | 75.6 | 75.1 | 75.2 | 70.0 | 67.7 | 56.8 | 156.8 |
| 1600 | 63.4 | 67.0 | 69.7 | 70.5 | 72.4 | 73.5 | 72.5 | 73.7 | 73.8 | 74.0 | 67.2 | 64.7 | 54.1 | 156.4 |
| 2000 | 59.3 | 64.7 | 67.0 | 69.7 | 71.5 | 73.0 | 70.9 | 72.6 | 71.6 | 70.4 | 63.6 | 61.2 | 49.7 | 156.1 |
| 2500 | 55.3 | 61.0 | 65.2 | 65.9 | 70.0 | 70.6 | 67.9 | 68.6 | 69.1 | 65.3 | 59.4 | 54.8 | 43.9 | 155.5 |
| 3150 | 46.4 | 55.4 | 59.1 | 61.2 | 65.0 | 66.0 | 63.3 | 63.2 | 63.4 | 60.1 | 51.8 | 44.4 | 29.5 | 154.2 |
| 4000 | 38.2 | 47.0 | 51.3 | 56.2 | 57.3 | 57.5 | 55.6 | 55.4 | 55.5 | 50.7 | 42.8 | 32.1 | 12.9 | 153.2 |
| 5000 | 25.4 | 34.3 | 42.1 | 45.9 | 50.3 | 50.4 | 46.0 | 45.7 | 44.7 | 36.6 | 26.9 | 13.5 | | 153.1 |
| 6300 | 2.8 | 13.7 | 24.8 | 29.2 | 33.3 | 34.1 | 31.9 | 27.9 | 28.2 | 15.6 | 2.7 | | | 151.7 |
| 8000 | | | | 3.1 | 6.4 | 8.3 | 8.5 | 2.9 | 0.7 | | | | | 150.2 |
| 10000 | | | | | | | | | | | | | | 149.3 |

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OASPL 76.1 78.9 81.1 82.8 83.8 85.0 84.7 86.2 88.0 89.5 87.3 86.0 75.6 168.1

PNL 82.7 86.5 89.1 91.0 92.8 93.9 92.7 94.1 94.8 95.0 90.3 87.0 75.9

PNLT 83.8 86.5 89.1 91.6 93.9 94.9 93.2 94.1 95.4 95.0 90.3 87.0 75.9

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-29-78 TAPE NO. N313 ALPHA SB59 TAMB 52.34
 LOCATION C41 ANECH CH AERO. RDG. ADH233 PAMB 29.5800 RELHUM 21.10

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
 0100A 0108A 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 88.39 M/SEC (290.0 FPS)

07/19/79 15.714

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400RAMODL X01090
BACKGROUND FJB400-FMODL X05220

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ
50
63
80

100
125
160
200

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 73.6 | 76.3 | 76.3 | 77.9 | 76.2 | 79.8 | 61.6 | 64.1 | 66.1 | 61.7 | 66.6 | 102.6 | 99.4 | 134.2 |
| 315 | 75.1 | 76.4 | 77.4 | 78.0 | 79.1 | 81.2 | 81.8 | 84.2 | 87.7 | 83.3 | 87.4 | 103.6 | 98.0 | 135.1 |
| 400 | 76.4 | 77.2 | 78.2 | 78.3 | 79.6 | 81.7 | 82.6 | 84.8 | 87.7 | 86.5 | 89.2 | 103.6 | 98.3 | 135.5 |
| 500 | 76.7 | 77.8 | 82.6 | 79.6 | 80.9 | 82.3 | 83.7 | 85.3 | 89.6 | 87.9 | 99.5 | 107.2 | 91.6 | 135.2 |
| 630 | 77.1 | 78.9 | 80.2 | 80.5 | 85.3 | 83.9 | 84.6 | 87.7 | 91.2 | 99.0 | 99.6 | 99.3 | 88.2 | 134.8 |
| 800 | 79.9 | 79.4 | 81.2 | 82.5 | 83.1 | 84.9 | 86.1 | 89.7 | 93.0 | 99.3 | 99.4 | 96.8 | 86.7 | 134.6 |
| 1000 | 80.7 | 80.1 | 82.1 | 82.4 | 83.4 | 86.1 | 87.4 | 90.9 | 94.1 | 98.9 | 98.5 | 93.4 | 84.6 | 134.2 |
| 1250 | 80.1 | 82.7 | 84.0 | 84.2 | 85.1 | 87.4 | 88.3 | 92.0 | 94.5 | 98.8 | 97.9 | 92.6 | 83.7 | 134.3 |
| 1600 | 82.5 | 82.6 | 83.4 | 84.7 | 86.7 | 88.6 | 89.5 | 92.7 | 95.1 | 99.0 | 97.7 | 92.1 | 83.9 | 134.6 |
| 2000 | 81.7 | 82.5 | 84.3 | 84.8 | 85.9 | 88.0 | 90.1 | 93.3 | 96.0 | 99.2 | 96.3 | 91.5 | 82.8 | 134.6 |
| 2500 | 82.7 | 83.7 | 85.0 | 86.0 | 86.8 | 89.2 | 90.8 | 93.8 | 95.8 | 98.6 | 95.3 | 91.5 | 82.5 | 134.5 |
| 3150 | 82.7 | 84.3 | 85.1 | 87.1 | 88.4 | 90.0 | 91.2 | 94.3 | 96.4 | 97.5 | 94.1 | 91.0 | 81.8 | 134.5 |
| 4000 | 83.4 | 84.2 | 85.5 | 86.2 | 88.0 | 90.4 | 91.8 | 94.6 | 95.8 | 96.4 | 93.6 | 89.4 | 80.2 | 134.1 |
| 5000 | 85.5 | 86.9 | 88.1 | 88.7 | 90.8 | 92.4 | 94.9 | 95.7 | 96.9 | 93.4 | 89.3 | 80.5 | 134.7 | |
| 6300 | 84.8 | 86.2 | 86.5 | 87.4 | 88.9 | 91.3 | 92.2 | 95.2 | 96.6 | 97.2 | 93.1 | 89.9 | 81.6 | 135.2 |
| 8000 | 83.7 | 85.1 | 85.8 | 87.3 | 89.4 | 90.8 | 91.3 | 94.4 | 96.2 | 96.8 | 93.1 | 90.2 | 81.7 | 135.2 |
| 10000 | 82.8 | 84.3 | 85.4 | 86.5 | 88.8 | 91.2 | 90.1 | 93.7 | 95.5 | 96.4 | 92.2 | 90.3 | 82.1 | 135.1 |
| 12500 | 79.9 | 82.4 | 82.8 | 85.1 | 87.4 | 89.0 | 89.2 | 92.1 | 93.2 | 94.1 | 90.7 | 89.0 | 80.9 | 134.1 |
| 16000 | 78.9 | 80.7 | 81.8 | 84.1 | 86.5 | 88.0 | 87.7 | 90.4 | 91.4 | 92.4 | 88.2 | 87.4 | 80.8 | 133.8 |
| 20000 | 73.4 | 78.3 | 78.8 | 81.7 | 85.2 | 86.8 | 84.9 | 87.3 | 88.5 | 88.2 | 84.6 | 84.5 | 78.3 | 132.8 |
| 25000 | 72.6 | 74.9 | 75.7 | 77.2 | 82.6 | 83.2 | 81.6 | 82.3 | 85.3 | 83.5 | 80.5 | 80.2 | 76.0 | 131.3 |
| 31500 | 70.8 | 71.2 | 73.9 | 76.3 | 76.8 | 77.6 | 77.7 | 79.6 | 82.0 | 80.8 | 77.8 | 76.5 | 70.6 | 130.9 |
| 40000 | 66.0 | 66.2 | 69.1 | 71.6 | 75.3 | 76.3 | 72.6 | 74.1 | 76.4 | 74.3 | 72.5 | 69.8 | 65.5 | 130.4 |
| 50000 | 60.4 | 61.6 | 62.2 | 65.4 | 68.4 | 69.6 | 68.1 | 67.3 | 71.3 | 67.1 | 65.3 | 64.3 | 60.2 | 128.6 |
| 63000 | 55.1 | 56.6 | 57.2 | 59.6 | 60.2 | 61.3 | 62.9 | 61.5 | 65.9 | 59.7 | 58.3 | 58.3 | 54.1 | 127.6 |
| 80000 | 49.9 | 47.7 | 50.3 | 53.7 | 53.1 | 54.8 | 54.1 | 54.8 | 59.0 | 53.3 | 52.2 | 49.1 | 46.0 | 127.4 |
| 0ASPL | 94.4 | 95.6 | 96.7 | 97.8 | 99.5 | 101.3 | 102.1 | 105.1 | 107.1 | 110.2 | 109.4 | 110.4 | 103.7 | 148.0 |

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TEST DATE 03-29-78 TAPE NO. N313 ALPHA SDB59 TAMB 52.52
LOCATION C41 ANECH CH AERO. RDG. ADH232 PAMB 29.5800 RELHUM 13.60

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 118.87 M/SEC (390.0 FPS)
0100A 0109A

517
157

07/19/79 15.714

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 88 40.0 FT. ARC

IDENTIFICATION - FJ-400RAMODL X01090

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 80.6 | 82.1 | 80.6 | 80.9 | 79.7 | 79.8 | 79.6 | 80.6 | 84.3 | 89.0 | 92.6 | 99.5 | 95.4 | 131.2 |
| 315 | 80.8 | 82.1 | 80.8 | 80.9 | 80.8 | 81.4 | 80.6 | 81.6 | 85.7 | 93.9 | 96.2 | 101.6 | 95.6 | 133.6 |
| 400 | 82.5 | 82.6 | 82.2 | 81.2 | 81.3 | 82.0 | 81.6 | 83.0 | 87.6 | 95.8 | 97.5 | 101.6 | 94.5 | 134.1 |
| 500 | 83.0 | 82.9 | 83.7 | 81.4 | 82.7 | 82.6 | 82.9 | 83.5 | 89.2 | 96.7 | 97.5 | 99.3 | 92.9 | 133.5 |
| 630 | 83.4 | 83.5 | 87.1 | 82.7 | 87.2 | 84.3 | 83.6 | 85.6 | 91.3 | 97.4 | 97.9 | 98.1 | 94.1 | 134.0 |
| 800 | 84.6 | 85.1 | 85.0 | 83.9 | 85.1 | 85.4 | 85.2 | 86.6 | 92.8 | 97.3 | 97.6 | 95.6 | 94.3 | 133.6 |
| 1000 | 87.4 | 86.7 | 86.1 | 86.0 | 85.5 | 86.7 | 86.6 | 88.8 | 93.2 | 97.3 | 96.9 | 94.9 | 93.4 | 133.7 |
| 1250 | 88.2 | 86.3 | 87.0 | 85.9 | 87.3 | 88.2 | 87.7 | 90.0 | 94.1 | 97.7 | 96.9 | 94.7 | 93.8 | 134.2 |
| 1600 | 87.6 | 89.0 | 89.0 | 89.0 | 89.1 | 89.6 | 89.0 | 95.2 | 97.9 | 95.5 | 93.9 | 92.3 | 93.5 | |
| 2000 | 89.9 | 89.0 | 88.5 | 88.4 | 88.5 | 89.2 | 89.9 | 91.7 | 95.3 | 97.9 | 95.0 | 94.4 | 92.6 | 134.6 |
| 2500 | 89.2 | 89.9 | 89.5 | 88.7 | 89.7 | 90.7 | 90.9 | 92.6 | 96.6 | 97.5 | 94.7 | 94.9 | 93.1 | 135.1 |
| 3150 | 90.1 | 90.2 | 90.3 | 90.1 | 91.6 | 91.9 | 92.0 | 93.9 | 96.5 | 96.8 | 94.2 | 93.0 | 90.5 | 135.3 |
| 4000 | 90.1 | 90.8 | 90.5 | 91.3 | 91.6 | 92.6 | 93.1 | 94.5 | 96.7 | 97.4 | 94.2 | 93.0 | 91.0 | 135.9 |
| 5000 | 90.7 | 90.8 | 91.1 | 90.7 | 92.7 | 93.8 | 94.2 | 95.2 | 97.9 | 98.0 | 94.4 | 94.3 | 93.3 | 136.9 |
| 6300 | 92.7 | 92.4 | 92.6 | 92.9 | 92.9 | 94.3 | 94.2 | 95.7 | 97.9 | 98.1 | 94.9 | 95.3 | 94.4 | 137.6 |
| 8000 | 91.9 | 92.6 | 92.0 | 92.0 | 93.4 | 93.8 | 93.4 | 95.2 | 97.5 | 98.1 | 94.5 | 95.9 | 95.3 | 137.8 |
| 10000 | 90.6 | 91.4 | 91.1 | 91.8 | 93.4 | 94.2 | 92.3 | 94.6 | 95.7 | 96.4 | 93.7 | 95.3 | 94.6 | 137.4 |
| 12500 | 92.2 | 92.5 | 92.2 | 91.8 | 91.9 | 92.0 | 91.4 | 93.1 | 95.2 | 95.9 | 92.4 | 94.9 | 95.4 | 137.7 |
| 16000 | 88.7 | 90.0 | 89.0 | 89.8 | 91.1 | 91.0 | 90.1 | 91.8 | 93.2 | 92.7 | 89.5 | 92.4 | 92.9 | 136.9 |
| 20000 | 87.3 | 88.0 | 87.7 | 88.5 | 89.7 | 89.8 | 87.4 | 89.1 | 88.9 | 86.7 | 83.9 | 86.4 | 88.9 | 135.9 |
| 25000 | 81.2 | 84.9 | 84.1 | 85.4 | 87.1 | 86.2 | 83.2 | 82.8 | 87.8 | 86.5 | 84.2 | 85.1 | 87.2 | 135.4 |
| 31500 | 79.5 | 80.7 | 80.1 | 80.2 | 80.8 | 80.8 | 80.2 | 81.4 | 83.3 | 81.1 | 79.6 | 79.7 | 82.0 | 134.0 |
| 40000 | 74.3 | 74.0 | 75.9 | 77.3 | 79.8 | 79.3 | 74.9 | 75.9 | 77.4 | 72.8 | 71.3 | 73.0 | 75.6 | 133.6 |
| 50000 | 71.8 | 70.9 | 72.3 | 73.3 | 72.9 | 72.6 | 69.8 | 68.0 | 73.1 | 66.6 | 65.4 | 68.2 | 70.5 | 132.8 |
| 63000 | 65.3 | 65.3 | 64.5 | 66.2 | 64.2 | 64.3 | 64.7 | 62.4 | 69.0 | 63.3 | 62.7 | 62.6 | 66.3 | 131.9 |
| 80000 | 55.8 | 56.6 | 56.4 | 57.8 | 57.1 | 57.4 | 56.6 | 55.6 | 59.2 | 53.4 | 52.8 | 52.8 | 55.5 | 130.3 |
| GASPL | 102.0 | 102.2 | 102.2 | 102.1 | 103.1 | 103.7 | 103.3 | 104.9 | 107.7 | 109.7 | 108.3 | 109.7 | 106.8 | 149.2 |

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MODEL/FULL SIZE SCALE FACTOR
INPUT 1.000 CALC. 1.000

FREE JET VELOCITY (FT/SEC) 390.00
FREE JET DIAMETER (IN) 43.00

REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

TEST DATE 03-29-78 TAPE NO. N313 ALPHA SB39 TAMB 52.52
LOCATION C41 ANECH CH AERO. RDG. ADH232 PAMB 29.5800 RELHUM 13.60

MODEL TEST POINT 0100A ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 110.67 M/SEC (390.0 FPS)
SIZE FREE-JET SPEED

07/19/79 15.714

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400RAMODL X01095

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 61.2 | 62.8 | 63.5 | 63.3 | 63.7 | 64.5 | 64.2 | 65.0 | 69.1 | 76.0 | 76.2 | 76.1 | 67.6 | 152.2 |
| 63 | 61.7 | 63.1 | 65.0 | 63.4 | 65.1 | 65.1 | 65.3 | 65.5 | 70.5 | 76.9 | 76.2 | 75.8 | 66.0 | 151.6 |
| 80 | 62.0 | 63.6 | 68.3 | 64.7 | 69.6 | 66.8 | 66.0 | 67.5 | 72.6 | 77.5 | 76.5 | 74.5 | 67.1 | 152.1 |
| 100 | 63.1 | 65.2 | 66.2 | 65.8 | 67.4 | 67.9 | 67.5 | 68.3 | 73.9 | 77.4 | 76.1 | 72.1 | 67.2 | 151.8 |
| 125 | 65.8 | 66.7 | 67.2 | 67.8 | 69.0 | 68.9 | 68.9 | 70.6 | 74.3 | 77.3 | 75.3 | 71.0 | 66.0 | 151.8 |
| 160 | 66.4 | 66.2 | 68.0 | 67.6 | 69.4 | 70.5 | 69.8 | 71.7 | 75.1 | 77.5 | 75.1 | 70.5 | 66.0 | 152.3 |
| 200 | 65.6 | 68.8 | 69.8 | 69.4 | 71.1 | 71.7 | 71.0 | 72.5 | 76.0 | 77.6 | 73.5 | 69.4 | 64.0 | 152.6 |
| 250 | 67.6 | 68.3 | 69.0 | 69.7 | 70.2 | 71.1 | 71.7 | 73.1 | 75.8 | 77.2 | 72.6 | 69.5 | 63.8 | 152.7 |
| 315 | 66.4 | 67.9 | 69.7 | 69.7 | 71.2 | 72.4 | 72.4 | 73.6 | 76.9 | 76.5 | 71.9 | 69.5 | 63.4 | 153.2 |
| 400 | 66.8 | 68.8 | 70.2 | 70.8 | 72.8 | 73.3 | 73.2 | 74.6 | 76.4 | 75.4 | 71.0 | 66.9 | 59.8 | 153.5 |
| 500 | 66.4 | 68.0 | 70.1 | 71.8 | 72.5 | 73.9 | 74.0 | 74.9 | 76.2 | 75.6 | 70.5 | 66.3 | 59.3 | 154.0 |
| 630 | 68.4 | 68.6 | 70.3 | 70.9 | 73.3 | 74.6 | 74.9 | 75.4 | 77.1 | 75.9 | 70.2 | 66.9 | 60.5 | 155.0 |
| 800 | 68.0 | 69.9 | 71.5 | 72.8 | 73.3 | 74.9 | 74.6 | 75.6 | 76.8 | 75.6 | 70.1 | 67.2 | 60.5 | 155.8 |
| 1000 | 66.7 | 69.8 | 70.7 | 71.7 | 73.6 | 74.2 | 73.7 | 74.9 | 76.2 | 75.3 | 69.4 | 67.2 | 60.2 | 155.9 |
| 1250 | 64.9 | 68.2 | 69.6 | 71.3 | 73.5 | 74.5 | 72.4 | 74.1 | 74.2 | 73.2 | 68.0 | 65.7 | 58.1 | 155.5 |
| 1600 | 65.6 | 68.7 | 70.2 | 71.0 | 71.7 | 72.1 | 71.3 | 72.3 | 73.2 | 72.2 | 65.8 | 63.9 | 56.6 | 155.8 |
| 2000 | 61.2 | 65.6 | 66.7 | 68.8 | 70.8 | 70.9 | 69.8 | 70.8 | 70.9 | 68.3 | 62.0 | 59.8 | 51.1 | 155.1 |
| 2500 | 58.0 | 62.4 | 64.4 | 66.7 | 68.8 | 69.2 | 66.5 | 67.4 | 65.7 | 61.1 | 54.6 | 51.0 | 42.2 | 154.0 |
| 3150 | 48.6 | 56.9 | 59.0 | 62.1 | 64.9 | 64.3 | 60.9 | 59.5 | 62.7 | 58.5 | 51.5 | 44.7 | 32.0 | 153.5 |
| 4000 | 40.6 | 48.0 | 51.2 | 53.6 | 55.6 | 56.0 | 54.9 | 54.9 | 54.4 | 48.4 | 40.7 | 30.4 | 12.4 | 152.1 |
| 5000 | 25.6 | 33.7 | 40.7 | 45.3 | 49.6 | 49.6 | 44.7 | 43.9 | 42.2 | 32.5 | 22.6 | 10.0 | | 151.7 |
| 6300 | 5.4 | 16.3 | 25.1 | 30.5 | 32.6 | 33.1 | 29.5 | 25.3 | 25.9 | 12.0 | | | | 150.9 |
| 8000 | | | | | | | | | | | | | | 150.0 |
| 10000 | | | | | | | | | | | | | | 148.4 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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OASPL 77.9 80.0 81.5 82.1 83.7 84.5 84.0 85.2 87.3 88.4 85.5 83.6 76.2 167.2
 PWL 84.7 67.8 89.4 90.5 92.3 92.8 91.7 92.7 94.0 93.4 88.3 85.5 78.0
 PNLT 84.7 87.8 89.4 91.1 93.5 93.9 91.7 92.7 94.5 93.4 88.3 85.5 79.0

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-29-78 TAPE NO. #313 ALPHA SB59 TAMB 52.52
 LOCATION C41 ANECH CH AERO. RDG. ADH232 PAMB 29.5800 RELHUM 13.60

MODEL TEST POINT 0100A 0109A ACQUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 110.67 M/SEC (390.0 FPS) FREE-JET SPEED

07/19/79 15.714

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 3B 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-AMODL XC1100
 BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 79.3 | 93.6 | 93.1 | 94.1 | 93.7 | 95.6 | 98.2 | 101.4 | 103.6 | 110.7 | 115.3 | 121.2 | 118.1 | 152.9 |
| 315 | 81.4 | 92.4 | 92.9 | 94.0 | 95.6 | 98.4 | 98.6 | 101.2 | 105.7 | 113.5 | 117.4 | 122.8 | 118.5 | 154.5 |
| 400 | 82.9 | 93.9 | 94.7 | 94.7 | 95.8 | 98.2 | 99.8 | 102.2 | 107.5 | 117.3 | 119.7 | 123.8 | 118.5 | 156.0 |
| 500 | 83.7 | 94.8 | 95.3 | 97.1 | 97.2 | 99.5 | 100.9 | 104.1 | 108.8 | 118.9 | 121.7 | 124.9 | 119.1 | 157.4 |
| 630 | 85.1 | 96.4 | 97.6 | 97.7 | 99.3 | 100.9 | 102.3 | 106.2 | 111.1 | 120.2 | 122.8 | 125.3 | 119.9 | 158.3 |
| 800 | 90.1 | 97.6 | 99.2 | 100.4 | 99.8 | 102.7 | 104.0 | 107.7 | 113.7 | 121.0 | 123.4 | 125.0 | 119.5 | 158.6 |
| 1000 | 108.2 | 111.7 | 110.5 | 112.0 | 107.4 | 106.5 | 105.9 | 109.3 | 113.0 | 128.3 | 132.9 | 133.4 | 125.5 | 166.9 |
| 1250 | 101.5 | 110.1 | 105.8 | 107.1 | 105.5 | 105.8 | 105.0 | 110.1 | 115.6 | 122.2 | 125.8 | 126.2 | 118.9 | 160.3 |
| 1600 | 103.1 | 111.2 | 111.3 | 107.4 | 106.7 | 106.6 | 110.5 | 115.2 | 120.8 | 123.0 | 122.5 | 116.3 | 159.2 | |
| 2000 | 99.3 | 109.3 | 111.1 | 112.8 | 114.8 | 114.8 | 107.4 | 110.8 | 116.8 | 122.7 | 123.4 | 122.6 | 113.3 | 159.3 |
| 2500 | 98.7 | 105.1 | 109.0 | 110.0 | 111.8 | 113.7 | 110.6 | 111.3 | 116.0 | 122.8 | 121.8 | 120.7 | 111.7 | 158.4 |
| 3150 | 97.7 | 100.6 | 109.6 | 109.8 | 108.9 | 111.5 | 113.1 | 112.8 | 117.1 | 121.7 | 121.4 | 119.5 | 110.3 | 157.9 |
| 4000 | 96.6 | 107.7 | 109.3 | 109.1 | 109.7 | 111.6 | 113.7 | 116.2 | 120.6 | 119.8 | 117.7 | 108.4 | 156.9 | |
| 5000 | 95.9 | 106.0 | 108.8 | 109.1 | 110.7 | 110.3 | 114.3 | 115.5 | 120.7 | 118.8 | 116.4 | 107.4 | 156.6 | |
| 6300 | 94.6 | 106.1 | 108.8 | 108.0 | 109.0 | 110.6 | 110.6 | 114.0 | 115.2 | 119.3 | 117.5 | 115.2 | 106.7 | 156.0 |
| 8000 | 93.9 | 105.6 | 106.7 | 107.5 | 108.8 | 109.7 | 109.8 | 113.1 | 114.9 | 118.1 | 117.0 | 114.6 | 105.4 | 155.6 |
| 10000 | 92.4 | 103.7 | 105.9 | 106.4 | 108.2 | 110.0 | 109.0 | 112.3 | 113.7 | 117.9 | 115.4 | 113.1 | 104.6 | 155.3 |
| 12500 | 89.3 | 101.8 | 103.7 | 105.4 | 106.8 | 108.5 | 107.2 | 110.4 | 111.6 | 115.7 | 113.3 | 110.4 | 103.1 | 154.1 |
| 16000 | 87.3 | 99.9 | 102.5 | 104.4 | 105.7 | 107.4 | 105.7 | 108.6 | 109.6 | 114.3 | 111.5 | 108.5 | 101.7 | 153.9 |
| 20000 | 82.1 | 97.3 | 98.2 | 101.1 | 104.5 | 105.3 | 103.0 | 105.7 | 107.1 | 110.8 | 108.1 | 105.5 | 99.2 | 152.8 |
| 25000 | 80.7 | 94.2 | 95.8 | 96.9 | 100.9 | 102.2 | 99.3 | 100.7 | 104.6 | 106.2 | 103.6 | 101.4 | 96.7 | 151.3 |
| 31500 | 79.4 | 89.6 | 93.5 | 95.6 | 95.8 | 96.5 | 96.0 | 97.4 | 100.6 | 103.0 | 99.1 | 95.0 | 89.9 | 150.5 |
| 40000 | 74.1 | 85.0 | 88.6 | 90.6 | 93.9 | 94.6 | 90.5 | 93.4 | 95.9 | 98.8 | 94.2 | 89.1 | 86.0 | 150.4 |
| 50000 | 67.5 | 80.0 | 81.9 | 84.3 | 86.1 | 87.3 | 86.0 | 86.4 | 91.4 | 92.9 | 87.6 | 84.7 | 79.5 | 148.7 |
| 63000 | 62.8 | 75.3 | 75.9 | 78.8 | 78.5 | 80.1 | 80.4 | 80.4 | 87.1 | 86.5 | 82.7 | 79.3 | 74.7 | 148.4 |
| 80000 | 57.1 | 69.5 | 71.0 | 75.0 | 73.0 | 75.9 | 73.4 | 75.6 | 81.7 | 81.2 | 77.8 | 72.1 | 66.9 | 150.0 |
| QASPL | 111.5 | 119.5 | 120.1 | 120.7 | 120.9 | 122.0 | 120.9 | 123.6 | 127.3 | 133.8 | 136.2 | 136.9 | 130.1 | 171.8 |

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TEST DATE 03-29-78 TAPE NO. N313 ALPHA SB59 TAMB 54.32
 LOCATION C41 ANECH CH AERO. RDG. ADH215 PAMB 29.5603 RELHUM 29.30

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.5 SQ IN) - MODEL 0. FREE-JET SPEED
 0100A 0110A 0. M/SEC (0. FPS)

07/19/79 15.714

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-AMODL X01100

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 79.3 | 93.6 | 93.1 | 94.1 | 93.7 | 95.6 | 98.2 | 101.4 | 103.6 | 110.7 | 115.3 | 121.2 | 118.1 | 152.9 |
| 315 | 81.4 | 92.4 | 92.9 | 94.0 | 95.8 | 98.4 | 98.6 | 101.2 | 105.7 | 113.5 | 117.4 | 122.8 | 118.5 | 154.5 |
| 400 | 82.9 | 93.9 | 94.7 | 94.7 | 95.8 | 98.2 | 99.6 | 102.2 | 107.5 | 117.3 | 119.7 | 123.8 | 118.5 | 156.0 |
| 500 | 83.7 | 94.8 | 95.5 | 97.1 | 97.2 | 99.5 | 100.9 | 104.1 | 108.8 | 118.9 | 121.7 | 124.9 | 119.1 | 157.4 |
| 630 | 85.1 | 96.4 | 97.6 | 97.7 | 99.3 | 100.9 | 102.3 | 106.2 | 111.1 | 120.2 | 122.8 | 125.3 | 119.9 | 158.3 |
| 800 | 90.1 | 97.6 | 99.2 | 100.4 | 99.8 | 102.7 | 104.0 | 107.7 | 113.7 | 121.0 | 123.4 | 125.0 | 119.5 | 158.6 |
| 1000 | 108.2 | 111.7 | 110.5 | 112.0 | 107.4 | 106.5 | 105.9 | 109.3 | 119.0 | 128.3 | 132.9 | 133.4 | 125.5 | 166.9 |
| 1250 | 101.5 | 110.1 | 108.8 | 107.1 | 105.5 | 105.8 | 106.0 | 110.1 | 115.6 | 122.2 | 125.8 | 126.2 | 118.9 | 160.3 |
| 1600 | 103.1 | 111.7 | 112.2 | 111.3 | 107.4 | 106.7 | 106.6 | 110.5 | 115.2 | 120.8 | 123.0 | 122.5 | 116.3 | 158.2 |
| 2000 | 99.3 | 109.5 | 111.1 | 112.8 | 114.9 | 114.8 | 114.8 | 110.8 | 116.8 | 122.7 | 123.4 | 122.6 | 113.3 | 159.3 |
| 2500 | 98.7 | 108.7 | 109.0 | 110.0 | 111.5 | 113.7 | 110.6 | 111.3 | 116.0 | 122.8 | 121.8 | 120.7 | 111.7 | 158.4 |
| 3150 | 97.7 | 108.5 | 109.6 | 109.8 | 108.9 | 111.5 | 113.1 | 112.8 | 117.1 | 121.7 | 121.4 | 119.5 | 110.3 | 157.9 |
| 4000 | 96.6 | 107.0 | 108.5 | 109.0 | 109.1 | 109.7 | 111.6 | 113.7 | 116.2 | 120.6 | 119.8 | 117.7 | 108.4 | 156.9 |
| 5000 | 95.9 | 106.8 | 108.3 | 108.8 | 109.1 | 110.7 | 111.3 | 114.3 | 115.5 | 120.7 | 118.8 | 116.4 | 107.4 | 156.6 |
| 6300 | 94.6 | 106.1 | 107.8 | 108.0 | 109.0 | 110.6 | 110.6 | 114.0 | 115.2 | 119.3 | 117.5 | 115.2 | 106.7 | 156.0 |
| 8000 | 93.9 | 105.6 | 106.7 | 107.5 | 108.8 | 109.7 | 109.8 | 113.1 | 114.9 | 118.1 | 117.0 | 114.6 | 105.4 | 155.6 |
| 10000 | 92.4 | 103.7 | 105.9 | 106.4 | 108.2 | 110.0 | 109.0 | 112.3 | 113.7 | 117.9 | 115.4 | 113.1 | 104.6 | 155.3 |
| 12500 | 89.3 | 101.8 | 103.7 | 105.4 | 106.8 | 108.5 | 107.2 | 110.4 | 111.6 | 116.7 | 113.3 | 110.4 | 103.1 | 154.1 |
| 16000 | 87.3 | 99.9 | 102.5 | 104.4 | 105.7 | 107.4 | 105.7 | 108.6 | 109.6 | 114.3 | 111.5 | 108.5 | 101.7 | 153.9 |
| 20000 | 82.1 | 97.3 | 99.2 | 101.1 | 104.5 | 105.3 | 103.0 | 105.7 | 107.1 | 110.8 | 108.1 | 105.5 | 99.2 | 152.8 |
| 25000 | 80.7 | 94.2 | 95.8 | 96.9 | 100.9 | 102.2 | 99.3 | 100.7 | 104.6 | 106.2 | 103.6 | 101.4 | 96.7 | 151.3 |
| 31500 | 79.4 | 89.6 | 93.5 | 95.6 | 95.6 | 96.5 | 96.0 | 97.4 | 100.6 | 103.0 | 99.1 | 95.0 | 89.9 | 150.5 |
| 40000 | 74.1 | 85.0 | 88.6 | 90.6 | 93.9 | 94.6 | 90.5 | 93.4 | 95.9 | 98.8 | 94.2 | 89.1 | 86.0 | 150.4 |
| 50000 | 67.5 | 80.0 | 81.9 | 84.3 | 86.1 | 87.3 | 86.0 | 86.4 | 91.4 | 92.9 | 87.6 | 84.7 | 79.5 | 148.7 |
| 63000 | 62.8 | 75.3 | 75.9 | 78.8 | 78.5 | 80.1 | 80.4 | 80.4 | 87.1 | 86.5 | 82.7 | 79.3 | 74.7 | 148.4 |
| 80000 | 57.1 | 69.5 | 71.0 | 75.0 | 73.0 | 75.9 | 73.4 | 75.6 | 81.7 | 81.2 | 77.8 | 72.1 | 66.9 | 150.0 |

CASPL 111.5 119.5 120.1 120.7 120.9 122.0 120.9 123.6 127.3 133.8 136.2 136.9 130.1 171.8

| | | | |
|------------------------------|----------------------------|-------|-----------------------------|
| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 0. | REFRACTION CORRECTION - YES |
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| | | | |
|-----------------------|-------------------|--------------|--------------|
| TEST DATE 03-29-78 | TAPE NO. N313 | ALPHA SB59 | TAMB 54.32 |
| LOCATION C41 ANECH CH | AERG. RDG. ADH215 | PAMB 29.5600 | RELHUM 29.30 |

| | | | | | | | |
|------------------|----------------|-------------------|-----|----------------------------|---------|----|-----------------|
| MODEL TEST POINT | ACOUSTIC RANGE | 12.2 M (40.0 FT) | ARC | 139.0 SQ CM (21.55 SQ IN) | - MODEL | 0. | M/SEC (0. FPS) |
| 0100A 0110A | | | | | | | |

ORIGINAL PAGE
OF POOR QUALITY

07/19/79 15.714

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
89.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-AMODL X01105

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|------|-------|
| 50 | 61.6 | 74.2 | 76.0 | 76.8 | 78.3 | 80.8 | 82.0 | 84.3 | 88.8 | 97.5 | 98.3 | 100.3 | 91.7 | 173.1 |
| 63 | 62.4 | 75.0 | 77.8 | 79.1 | 79.6 | 82.1 | 83.3 | 86.1 | 90.1 | 99.1 | 100.4 | 101.4 | 92.2 | 175.5 |
| 80 | 63.7 | 76.5 | 78.9 | 79.6 | 81.6 | 83.4 | 84.6 | 88.1 | 92.4 | 100.4 | 101.4 | 101.6 | 92.9 | 176.4 |
| 100 | 68.6 | 77.7 | 80.3 | 82.3 | 82.1 | 85.1 | 86.4 | 89.6 | 94.8 | 101.1 | 101.9 | 101.3 | 92.3 | 176.7 |
| 125 | 86.6 | 91.7 | 91.6 | 93.9 | 89.6 | 88.9 | 88.1 | 91.1 | 100.1 | 108.3 | 111.4 | 109.5 | 98.1 | 185.1 |
| 160 | 79.8 | 89.9 | 89.8 | 88.8 | 87.6 | 88.1 | 88.1 | 91.8 | 96.6 | 102.0 | 104.0 | 102.1 | 91.1 | 178.4 |
| 200 | 81.1 | 91.3 | 93.0 | 92.8 | 89.3 | 88.8 | 88.6 | 92.0 | 96.0 | 100.4 | 101.0 | 98.1 | 88.0 | 176.4 |
| 250 | 76.9 | 88.9 | 91.6 | 94.2 | 96.7 | 96.7 | 99.2 | 92.2 | 97.4 | 102.0 | 101.0 | 97.7 | 84.5 | 177.4 |
| 315 | 75.9 | 87.7 | 89.2 | 91.1 | 93.3 | 95.4 | 92.1 | 92.3 | 96.2 | 101.9 | 99.0 | 95.3 | 82.0 | 175.5 |
| 400 | 74.5 | 87.2 | 89.5 | 90.5 | 90.1 | 92.9 | 94.3 | 93.5 | 97.0 | 100.3 | 98.1 | 93.5 | 79.6 | 176.0 |
| 500 | 72.9 | 85.2 | 88.1 | 89.4 | 90.0 | 90.7 | 92.5 | 94.2 | 95.8 | 98.9 | 96.0 | 91.0 | 76.8 | 175.0 |
| 630 | 71.6 | 84.6 | 87.5 | 88.9 | 89.7 | 91.5 | 91.0 | 94.4 | 94.8 | 98.6 | 94.6 | 89.0 | 74.7 | 174.8 |
| 800 | 69.9 | 83.5 | 86.8 | 87.9 | 89.4 | 91.2 | 91.0 | 93.9 | 94.1 | 96.7 | 92.8 | 87.1 | 72.8 | 174.1 |
| 1000 | 68.7 | 82.8 | 85.4 | 87.2 | 89.1 | 90.2 | 90.0 | 92.8 | 93.6 | 95.3 | 91.9 | 85.8 | 70.3 | 173.8 |
| 1250 | 66.7 | 80.6 | 84.3 | 85.9 | 88.3 | 90.4 | 89.1 | 91.8 | 92.1 | 94.8 | 89.7 | 83.5 | 68.2 | 173.5 |
| 1600 | 62.8 | 78.0 | 81.7 | 84.6 | 86.7 | 88.5 | 87.0 | 89.6 | 89.6 | 91.9 | 86.8 | 79.5 | 64.3 | 172.3 |
| 2000 | 59.8 | 75.8 | 80.1 | 83.3 | 85.4 | 87.3 | 85.3 | 87.6 | 87.2 | 89.9 | 84.0 | 76.0 | 59.8 | 172.1 |
| 2500 | 52.8 | 71.7 | 75.9 | 79.3 | 83.6 | 84.7 | 82.1 | 83.9 | 83.9 | 85.2 | 78.7 | 70.1 | 52.4 | 170.9 |
| 3150 | 48.0 | 66.2 | 70.7 | 73.6 | 78.6 | 80.3 | 77.1 | 77.4 | 79.5 | 78.2 | 70.9 | 61.1 | 41.5 | 169.4 |
| 4000 | 40.5 | 56.8 | 64.6 | 69.1 | 70.6 | 71.7 | 70.8 | 70.8 | 71.6 | 70.3 | 60.2 | 45.7 | 20.3 | 168.6 |
| 5000 | 25.4 | 44.7 | 53.5 | 58.6 | 63.7 | 64.8 | 60.3 | 61.4 | 60.7 | 58.4 | 45.5 | 25.1 | | 168.5 |
| 6300 | 1.0 | 25.4 | 34.7 | 41.6 | 45.8 | 47.8 | 45.7 | 43.7 | 44.2 | 38.3 | 21.1 | | | 166.9 |
| 8000 | | | 7.4 | 16.8 | 20.0 | 22.8 | 22.0 | 18.4 | 18.5 | 7.2 | | | | 166.5 |
| 10000 | | | | | | | | | | | | | | 168.1 |

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GASPL 89.4 98.5 100.2 101.6 102.1 103.2 101.9 104.0 107.4 113.1 114.2 112.5 102.0 189.8
 PNL 91.9 102.9 105.3 107.3 109.0 110.1 109.0 110.8 112.9 117.2 116.9 114.0 102.2
 PNL 94.0 104.2 105.4 108.7 110.2 111.3 109.5 110.8 113.6 118.4 118.3 115.3 103.3

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-29-79 TAPE NO. N313 ALPHA SB59 TAMB 54.32
 LOCATION C41 ANECH CH AERO. RDG. ADH215 PAMB 29.5600 RELHUM 29.30

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
 0100A 0110A 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)

07/19/79 15.714

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-AMODL X01120
BACKGROUND FJB400-FMODL X05220

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PVL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

115.1

116.3

117.6

120.2

121.2

119.3

119.7

122.0

125.4

130.9

132.6

131.7

122.0

168.3

ORIGINAL PAGE 19
OF POOR QUALITY

TEST DATE 03-29-78

LOCATION C41 ANECH CH

TAPE NO. N313

AERO. RDG. ADH223

ALPHA SB59

PAMB 29.5600

TAMB 56.46

RELHUM 13.30

MODEL TEST POINT

0100A 0112A

ACOUSTIC RANGE

12.2 M (40.0 FT)

ARC

139.0 SQ CM (

SIZE

21.55 SQ IN)

- MODEL

118.67 M/SEC (

FREE-JET SPEED

390.0 FPS)

163

07/19/79 15.714

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-AMODL X01120

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 94.2 | 96.1 | 95.8 | 94.8 | 93.2 | 94.1 | 93.8 | 93.3 | 100.1 | 107.2 | 110.9 | 117.5 | 113.4 | 149.0 |
| 315 | 94.2 | 96.0 | 95.6 | 94.8 | 95.3 | 96.1 | 95.5 | 97.3 | 102.9 | 112.1 | 115.6 | 120.9 | 114.7 | 152.4 |
| 400 | 95.6 | 96.1 | 95.7 | 95.0 | 95.8 | 96.7 | 96.8 | 98.9 | 104.4 | 114.6 | 118.0 | 122.2 | 113.8 | 154.0 |
| 500 | 97.4 | 96.7 | 96.8 | 95.8 | 96.8 | 97.6 | 97.9 | 100.1 | 106.5 | 115.5 | 118.9 | 121.4 | 113.1 | 154.0 |
| 630 | 97.4 | 97.5 | 98.6 | 97.4 | 98.2 | 98.8 | 98.9 | 101.5 | 112.4 | 121.9 | 126.5 | 127.2 | 115.7 | 160.4 |
| 800 | 98.4 | 99.6 | 99.8 | 98.1 | 104.2 | 101.2 | 101.9 | 106.6 | 110.5 | 117.5 | 120.5 | 121.1 | 115.0 | 155.2 |
| 1000 | 112.3 | 114.1 | 114.9 | 102.9 | 100.8 | 101.4 | 101.5 | 104.2 | 110.9 | 116.2 | 120.0 | 118.8 | 112.8 | 155.3 |
| 1250 | 111.2 | 108.0 | 105.4 | 102.5 | 103.8 | 102.9 | 102.4 | 105.4 | 112.2 | 117.1 | 120.2 | 118.0 | 113.9 | 154.7 |
| 1600 | 114.1 | 114.2 | 111.5 | 107.2 | 121.9 | 110.1 | 104.8 | 105.5 | 113.6 | 118.7 | 120.2 | 118.0 | 114.4 | 158.1 |
| 2000 | 117.1 | 117.7 | 118.9 | 122.7 | 114.7 | 112.9 | 107.4 | 107.1 | 114.2 | 120.4 | 120.2 | 119.8 | 115.9 | 159.9 |
| 2500 | 112.8 | 112.3 | 112.9 | 114.5 | 109.9 | 113.4 | 113.7 | 109.4 | 115.6 | 120.3 | 119.9 | 119.4 | 116.4 | 157.7 |
| 3150 | 115.8 | 114.9 | 112.2 | 109.6 | 109.8 | 109.7 | 112.3 | 111.7 | 115.8 | 119.5 | 119.4 | 118.0 | 114.5 | 157.2 |
| 4000 | 111.0 | 111.3 | 112.1 | 111.8 | 110.7 | 109.6 | 109.9 | 112.7 | 115.7 | 119.6 | 118.1 | 117.4 | 114.1 | 156.6 |
| 5000 | 111.5 | 110.6 | 110.4 | 110.6 | 109.8 | 111.2 | 110.3 | 113.4 | 116.0 | 118.0 | 116.6 | 115.2 | 112.8 | 155.9 |
| 6300 | 110.1 | 110.1 | 110.5 | 110.8 | 109.6 | 110.7 | 109.9 | 112.5 | 115.3 | 117.0 | 114.8 | 113.3 | 110.4 | 155.3 |
| 8000 | 108.6 | 109.4 | 109.8 | 110.0 | 109.4 | 109.8 | 108.8 | 111.3 | 113.9 | 115.4 | 113.0 | 112.3 | 109.4 | 154.4 |
| 10000 | 108.1 | 108.7 | 109.1 | 109.2 | 109.8 | 107.7 | 109.9 | 111.6 | 113.2 | 111.4 | 110.1 | 107.7 | 103.6 | 153.6 |
| 12500 | 106.1 | 106.4 | 107.2 | 107.8 | 108.1 | 107.6 | 105.8 | 107.6 | 110.4 | 112.4 | 109.0 | 108.1 | 106.9 | 152.9 |
| 16000 | 105.1 | 106.0 | 105.7 | 107.0 | 106.8 | 106.7 | 104.2 | 106.4 | 108.7 | 109.8 | 106.4 | 106.9 | 106.5 | 152.7 |
| 20000 | 102.8 | 103.7 | 103.9 | 104.4 | 105.4 | 105.0 | 101.7 | 103.7 | 106.6 | 106.3 | 103.8 | 104.3 | 105.8 | 152.2 |
| 25000 | 97.2 | 100.4 | 100.1 | 103.4 | 102.3 | 100.9 | 98.5 | 99.5 | 103.1 | 103.4 | 100.0 | 99.0 | 100.3 | 150.8 |
| 31500 | 94.7 | 96.0 | 96.7 | 95.9 | 95.8 | 96.1 | 94.5 | 95.4 | 99.4 | 99.6 | 96.8 | 95.1 | 97.8 | 149.8 |
| 40000 | 89.7 | 88.6 | 91.2 | 92.8 | 94.9 | 93.8 | 89.3 | 90.9 | 95.4 | 93.4 | 91.4 | 90.4 | 92.1 | 149.6 |
| 50000 | 87.1 | 85.7 | 87.4 | 88.1 | 87.2 | 87.1 | 85.0 | 84.5 | 91.5 | 87.6 | 86.4 | 84.9 | 87.3 | 148.9 |
| 63000 | 79.5 | 79.1 | 79.6 | 81.0 | 78.5 | 78.4 | 79.3 | 78.7 | 86.3 | 82.6 | 82.2 | 76.7 | 78.6 | 147.7 |
| 80000 | 69.3 | 69.7 | 70.0 | 72.6 | 72.2 | 73.1 | 71.6 | 71.9 | 76.4 | 72.8 | 72.4 | 66.9 | 68.8 | 145.9 |
| OASPL | 123.6 | 123.6 | 123.7 | 124.9 | 124.4 | 121.4 | 120.4 | 121.6 | 125.7 | 130.3 | 131.9 | 132.4 | 126.3 | 169.2 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 390.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 03-29-78 | TAPE NO. | N313 | ALPHA | S859 | TAMB | 55.46 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH223 | PAMB | 29.5600 | RELHUM | 13.30 |

| MODEL | TEST POINT | 12.2 M (40.0 FT) | ARC | 139.0 SQ CM (21.55 SQ IN) | MODEL | 118.87 M/SEC (390.0 FPS) |
|-------|------------|-------------------|-----|----------------------------|-------|---------------------------|
| 0100A | 0112A | | | | | |

FREE-JET SPEED

07/19/79 15.714

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-AMODL X01125

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|-------|-------|------|------|------|------|-------|-------|-------|-------|-------|
| 50 | 74.3 | 76.3 | 77.0 | 77.0 | 78.0 | 79.2 | 79.2 | 81.0 | 85.7 | 94.8 | 96.7 | 98.6 | 86.9 | 172.1 |
| 63 | 76.0 | 76.9 | 78.0 | 77.8 | 79.1 | 80.1 | 80.3 | 82.1 | 87.8 | 95.7 | 97.5 | 97.8 | 86.2 | 172.1 |
| 80 | 76.0 | 77.7 | 79.9 | 79.4 | 80.5 | 81.3 | 81.3 | 83.4 | 93.6 | 102.1 | 105.1 | 103.6 | 88.7 | 178.6 |
| 100 | 77.0 | 79.7 | 81.0 | 80.0 | 86.5 | 83.6 | 84.3 | 88.6 | 91.7 | 97.5 | 99.0 | 97.3 | 87.8 | 173.4 |
| 125 | 90.7 | 94.1 | 96.0 | 84.7 | 83.0 | 83.8 | 83.7 | 86.0 | 92.0 | 96.2 | 98.4 | 94.9 | 85.4 | 173.5 |
| 160 | 89.4 | 87.8 | 86.4 | 84.2 | 85.9 | 86.2 | 84.5 | 87.1 | 93.2 | 96.9 | 98.4 | 93.9 | 86.1 | 172.9 |
| 200 | 92.0 | 93.8 | 92.4 | 88.7 | 103.9 | 92.2 | 86.8 | 88.0 | 94.4 | 98.3 | 98.2 | 93.6 | 86.1 | 176.3 |
| 250 | 94.8 | 97.0 | 99.4 | 104.1 | 96.5 | 94.8 | 89.2 | 88.4 | 94.8 | 99.8 | 97.9 | 94.9 | 87.1 | 178.1 |
| 315 | 90.1 | 91.3 | 93.1 | 95.6 | 91.4 | 95.1 | 95.2 | 90.5 | 95.9 | 99.3 | 97.1 | 94.0 | 86.7 | 175.9 |
| 400 | 92.5 | 93.5 | 92.1 | 90.4 | 91.0 | 91.1 | 93.5 | 92.5 | 95.7 | 98.1 | 96.1 | 91.9 | 83.8 | 175.3 |
| 500 | 87.2 | 89.5 | 91.7 | 92.2 | 91.6 | 90.7 | 90.9 | 93.1 | 95.3 | 97.8 | 94.3 | 90.7 | 82.4 | 174.7 |
| 630 | 87.3 | 88.4 | 89.6 | 90.7 | 90.5 | 92.0 | 91.0 | 93.6 | 95.3 | 95.8 | 92.3 | 87.8 | 80.0 | 174.1 |
| 800 | 85.4 | 87.6 | 89.4 | 90.7 | 90.0 | 91.3 | 90.3 | 92.4 | 94.2 | 94.5 | 90.0 | 85.2 | 76.6 | 173.4 |
| 1000 | 83.4 | 86.5 | 88.5 | 89.7 | 89.7 | 90.3 | 89.1 | 91.0 | 92.6 | 92.5 | 87.8 | 83.5 | 74.4 | 172.6 |
| 1250 | 82.5 | 85.5 | 87.2 | 88.6 | 89.3 | 90.1 | 87.8 | 89.4 | 90.1 | 90.0 | 85.7 | 80.5 | 71.2 | 171.7 |
| 1600 | 79.5 | 82.6 | 85.2 | 87.0 | 87.9 | 87.7 | 85.7 | 86.8 | 88.4 | 88.6 | 82.5 | 77.1 | 68.1 | 171.0 |
| 2000 | 77.6 | 81.6 | 83.4 | 85.9 | 86.4 | 86.6 | 83.9 | 85.3 | 86.3 | 85.4 | 78.8 | 74.3 | 64.7 | 170.8 |
| 2500 | 73.5 | 78.1 | 80.7 | 82.7 | 84.6 | 84.4 | 80.8 | 82.0 | 83.4 | 80.7 | 74.5 | 68.9 | 59.0 | 170.3 |
| 3150 | 64.5 | 72.4 | 75.0 | 77.1 | 80.1 | 79.0 | 76.3 | 76.2 | 78.0 | 75.3 | 67.4 | 58.6 | 45.1 | 168.9 |
| 4000 | 55.8 | 63.3 | 67.8 | 69.4 | 70.6 | 71.2 | 69.3 | 68.9 | 70.4 | 66.8 | 57.8 | 45.9 | 28.1 | 167.9 |
| 5000 | 41.1 | 48.3 | 56.0 | 60.8 | 64.6 | 64.1 | 59.1 | 58.9 | 60.2 | 53.1 | 42.7 | 27.4 | 0.6 | 167.7 |
| 6300 | 20.6 | 31.1 | 40.2 | 45.3 | 46.9 | 47.6 | 44.7 | 41.8 | 44.3 | 33.0 | 20.0 | | 167.0 | |
| 8000 | | | 11.1 | 19.0 | 20.0 | 21.1 | 20.9 | 16.7 | 17.7 | 3.3 | | | 165.9 | |
| 10000 | | | | | | | | | | | | | 164.0 | |

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QASPL 100.6 102.5 103.8 105.9 106.0 102.5 101.4 101.9 105.5 109.3 109.7 107.7 97.0 187.2
PNL 105.5 108.0 109.8 112.2 112.1 109.4 108.2 108.7 111.5 113.7 111.8 108.6 99.3
PNLT 106.8 109.7 111.9 114.2 114.1 110.6 108.9 109.3 112.1 114.2 111.5 108.6 100.5

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-29-78 TAPE NO. N313 ALPHA SB59 TANS 58.46
LOCATION C41 ANECH CH AERO. RDG. ADH223 PAMB 29.5600 RELHUM 13.30

MODEL TEST POINT ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 118.87 M/SEC (390.0 FPS)
01100A 0112A

07/19/79 15.714

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-AMODL X01130
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 82.0 | 86.3 | 85.3 | 87.1 | 87.0 | 89.3 | 91.5 | 94.1 | 96.3 | 102.7 | 106.8 | 113.2 | 110.1 | 144.9 |
| 315 | 83.1 | 86.2 | 87.2 | 87.5 | 89.6 | 91.4 | 92.1 | 94.2 | 98.2 | 104.3 | 108.4 | 114.6 | 110.5 | 146.2 |
| 400 | 85.2 | 86.9 | 88.2 | 88.3 | 89.1 | 91.2 | 92.8 | 95.3 | 99.5 | 108.3 | 110.7 | 116.8 | 111.3 | 147.8 |
| 500 | 86.0 | 88.0 | 89.6 | 89.8 | 90.4 | 92.5 | 93.9 | 95.8 | 100.6 | 109.1 | 111.8 | 116.9 | 112.1 | 148.8 |
| 630 | 86.6 | 89.4 | 90.9 | 90.9 | 92.8 | 94.2 | 94.5 | 98.2 | 102.7 | 109.7 | 112.4 | 117.3 | 112.4 | 149.3 |
| 800 | 90.1 | 89.9 | 91.7 | 92.7 | 92.6 | 95.2 | 96.3 | 100.0 | 104.9 | 110.0 | 111.6 | 117.1 | 113.0 | 149.3 |
| 1000 | 94.2 | 93.3 | 94.3 | 94.1 | 94.2 | 96.3 | 97.7 | 100.8 | 106.1 | 110.4 | 110.5 | 116.2 | 112.1 | 148.9 |
| 1250 | 91.1 | 94.4 | 95.7 | 96.2 | 96.6 | 98.4 | 99.3 | 102.0 | 106.4 | 111.3 | 112.1 | 117.3 | 112.5 | 149.9 |
| 1600 | 93.2 | 92.6 | 94.1 | 94.9 | 95.7 | 98.3 | 98.7 | 102.6 | 106.1 | 110.0 | 110.4 | 116.1 | 111.9 | 148.9 |
| 2000 | 94.5 | 94.7 | 95.3 | 95.3 | 95.4 | 97.5 | 99.1 | 103.3 | 106.8 | 110.4 | 110.3 | 116.0 | 111.0 | 148.9 |
| 2500 | 93.4 | 94.5 | 95.2 | 96.0 | 96.3 | 97.9 | 100.1 | 103.2 | 106.5 | 111.1 | 110.5 | 115.7 | 109.4 | 148.9 |
| 3150 | 94.7 | 94.8 | 95.1 | 96.1 | 96.4 | 98.8 | 100.4 | 104.3 | 106.9 | 110.3 | 110.4 | 115.0 | 108.5 | 148.5 |
| 4000 | 94.1 | 94.3 | 95.8 | 95.5 | 96.8 | 98.4 | 100.1 | 103.8 | 106.3 | 108.7 | 110.3 | 113.4 | 107.4 | 147.6 |
| 5000 | 93.8 | 93.7 | 94.5 | 95.2 | 96.3 | 98.4 | 100.2 | 103.7 | 105.5 | 108.7 | 109.8 | 112.4 | 106.9 | 147.2 |
| 6300 | 91.4 | 92.8 | 94.4 | 94.5 | 96.0 | 99.1 | 99.8 | 103.3 | 105.0 | 107.5 | 108.3 | 111.5 | 106.4 | 146.6 |
| 8000 | 90.3 | 93.6 | 94.7 | 94.5 | 95.5 | 97.4 | 99.0 | 101.8 | 104.6 | 106.3 | 106.2 | 110.1 | 105.4 | 145.7 |
| 10000 | 87.3 | 92.2 | 93.9 | 93.4 | 95.5 | 97.9 | 97.6 | 101.4 | 102.9 | 104.3 | 104.4 | 108.4 | 103.3 | 144.8 |
| 12500 | 83.8 | 89.9 | 91.5 | 92.3 | 94.3 | 95.7 | 95.9 | 99.5 | 100.4 | 101.8 | 101.7 | 105.7 | 101.1 | 143.2 |
| 16000 | 81.1 | 86.7 | 89.6 | 91.3 | 93.2 | 95.0 | 93.7 | 97.1 | 97.9 | 100.1 | 99.1 | 103.1 | 98.8 | 142.4 |
| 20000 | 76.1 | 84.0 | 85.3 | 88.2 | 91.7 | 92.7 | 90.7 | 93.3 | 94.8 | 96.0 | 95.8 | 100.0 | 95.7 | 140.9 |
| 25000 | 74.2 | 80.2 | 82.7 | 83.7 | 86.3 | 89.4 | 87.0 | 88.8 | 91.8 | 90.8 | 91.0 | 95.4 | 93.5 | 139.3 |
| 31500 | 72.0 | 75.5 | 79.7 | 82.5 | 82.8 | 83.8 | 83.2 | 85.0 | 88.2 | 88.6 | 88.3 | 90.2 | 87.6 | 138.5 |
| 40000 | 67.3 | 69.8 | 74.4 | 76.6 | 81.0 | 81.2 | 78.8 | 80.1 | 82.9 | 83.6 | 83.0 | 84.3 | 83.2 | 137.7 |
| 50000 | 60.6 | 64.9 | 67.0 | 69.9 | 73.1 | 73.8 | 73.0 | 72.5 | 77.3 | 77.2 | 77.6 | 79.8 | 77.9 | 136.0 |
| 63000 | 55.4 | 59.4 | 61.0 | 64.1 | 64.9 | 65.8 | 67.6 | 66.3 | 72.7 | 70.2 | 71.1 | 74.3 | 72.3 | 135.3 |
| 80000 | 49.4 | 51.5 | 55.1 | 59.0 | 58.4 | 60.5 | 59.8 | 61.1 | 66.6 | 63.4 | 67.4 | 67.3 | 65.0 | 136.1 |
| OASPL | 104.0 | 105.1 | 106.2 | 106.6 | 107.6 | 109.7 | 110.7 | 114.1 | 117.2 | 121.4 | 122.5 | 127.5 | 122.8 | 160.7 |

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OF POOR QUALITY

| TEST DATE | 03-29-78 | TAPE NO. | N313 | ALPHA | SB59 | TAMB | 54.14 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH228 | PAMB | 29.5600 | RELHUM | 14.30 |

| MODEL | TEST POINT | ACUSTIC RANGE | 12.2 M (40.0 FT) | ARC | 139.0 SQ CM (21.55 SQ IN) | MODEL | SIZE | FREE-JET SPEED |
|-------|------------|---------------|-------------------|-----|----------------------------|-------|------|-----------------|
| 0100A | 0113A | | | | | | 0. | M/SEC (0. FPS) |

07/19/79 15.714

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-AMODL X01130

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1500

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

GASPL

104.0

105.1

106.2

106.6

107.6

109.7

110.7

114.1

117.2

121.4

122.5

127.5

160.7

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OF POOR QUALITY

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-29-78 TAPE NO. N313 ALPHA 5859 TAMB 64.14
 LOCATION C41 ANECH CH AERO. RDG. ADH226 PAMB 29.5600 RELHUM 14.30

MODEL TEST POINT 0100A 0113A ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

07/19/79 15.714

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-AMODL X01135

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 63.6 | 67.2 | 69.5 | 70.3 | 71.5 | 73.8 | 75.3 | 77.3 | 80.6 | 88.5 | 89.4 | 92.3 | 84.4 | 165.9 |
| 63 | 64.7 | 68.2 | 70.8 | 71.8 | 72.8 | 75.1 | 76.3 | 77.8 | 81.8 | 89.3 | 90.4 | 93.4 | 85.2 | 166.9 |
| 80 | 65.2 | 69.5 | 72.1 | 72.9 | 75.2 | 76.7 | 78.9 | 80.1 | 83.9 | 89.9 | 91.0 | 93.7 | 85.4 | 167.4 |
| 100 | 68.7 | 70.0 | 72.9 | 74.6 | 74.9 | 77.6 | 78.6 | 81.9 | 86.1 | 90.1 | 90.2 | 93.4 | 85.8 | 167.5 |
| 125 | 72.7 | 73.3 | 75.4 | 75.9 | 76.4 | 78.7 | 79.9 | 82.7 | 87.2 | 90.4 | 88.9 | 92.3 | 84.7 | 167.0 |
| 160 | 69.3 | 74.3 | 76.6 | 77.9 | 78.7 | 80.7 | 81.4 | 83.7 | 87.4 | 91.1 | 90.4 | 93.2 | 84.7 | 168.1 |
| 200 | 71.2 | 72.2 | 74.9 | 76.4 | 77.7 | 80.5 | 80.7 | 84.2 | 86.9 | 89.6 | 88.4 | 91.7 | 83.6 | 167.0 |
| 250 | 72.1 | 74.1 | 75.8 | 76.6 | 77.1 | 79.4 | 80.9 | 84.6 | 87.3 | 89.7 | 88.0 | 91.1 | 82.1 | 167.0 |
| 315 | 70.6 | 73.5 | 75.5 | 77.0 | 77.8 | 79.6 | 81.6 | 84.3 | 86.7 | 90.1 | 87.8 | 90.3 | 79.7 | 167.0 |
| 400 | 71.5 | 73.5 | 75.0 | 76.8 | 77.6 | 80.1 | 81.6 | 85.1 | 86.6 | 88.9 | 87.1 | 89.0 | 77.8 | 166.7 |
| 500 | 70.4 | 72.3 | 75.4 | 75.9 | 77.5 | 79.5 | 81.0 | 84.2 | 85.9 | 87.0 | 86.6 | 86.7 | 75.8 | 165.8 |
| 630 | 69.6 | 71.6 | 73.7 | 75.3 | 76.9 | 79.2 | 80.8 | 83.8 | 84.7 | 86.5 | 85.5 | 85.0 | 74.1 | 165.3 |
| 800 | 66.7 | 70.3 | 73.3 | 74.4 | 76.4 | 79.7 | 80.2 | 83.2 | 83.9 | 85.0 | 83.5 | 83.4 | 72.6 | 164.7 |
| 1000 | 65.2 | 70.9 | 73.4 | 74.2 | 75.8 | 77.9 | 79.2 | 81.5 | 83.3 | 83.4 | 81.1 | 81.3 | 70.3 | 163.8 |
| 1250 | 61.6 | 69.1 | 72.3 | 73.0 | 75.0 | 78.2 | 77.7 | 80.9 | 81.4 | 81.2 | 78.7 | 78.8 | 65.8 | 162.9 |
| 1600 | 57.3 | 66.1 | 69.5 | 71.7 | 74.1 | 75.7 | 75.7 | 78.4 | 78.0 | 75.1 | 74.7 | 74.7 | 62.3 | 161.3 |
| 2000 | 53.6 | 62.4 | 67.2 | 70.3 | 72.9 | 74.9 | 73.4 | 76.0 | 75.6 | 75.8 | 71.6 | 70.5 | 57.0 | 160.5 |
| 2500 | 46.8 | 58.4 | 62.1 | 66.4 | 70.8 | 72.1 | 69.8 | 71.5 | 71.6 | 70.4 | 66.5 | 64.6 | 49.0 | 159.1 |
| 3150 | 41.5 | 52.1 | 57.6 | 60.4 | 66.0 | 67.5 | 64.7 | 65.5 | 66.7 | 62.8 | 58.4 | 55.1 | 38.4 | 157.4 |
| 4000 | 33.1 | 42.7 | 50.8 | 56.0 | 57.5 | 59.0 | 58.0 | 58.5 | 59.3 | 55.8 | 49.4 | 41.0 | 17.9 | 156.6 |
| 5000 | 18.6 | 29.4 | 39.2 | 44.6 | 50.8 | 51.6 | 48.6 | 48.1 | 47.7 | 43.3 | 34.3 | 21.3 | | 155.9 |
| 6300 | | 10.3 | 19.8 | 27.2 | 32.8 | 34.3 | 32.7 | 29.8 | 30.1 | 22.6 | 11.1 | | | 154.1 |
| 8000 | | | | 2.1 | 6.5 | 8.5 | 9.2 | 4.3 | 4.1 | | | | | 154.3 |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GASPL 81.1 83.7 86.1 87.3 88.6 90.9 91.9 94.8 97.3 100.5 99.9 102.6 94.1 178.5
 PNL 85.0 88.7 91.5 93.6 95.8 97.9 97.8 100.7 102.4 104.5 102.8 104.4 94.8
 PNL 85.6 88.7 91.5 93.6 97.0 99.0 97.8 100.7 102.4 104.5 102.8 104.4 95.9

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-29-78 TAPE NO. N313 ALPHA SB59 TAMB 54.14
 LOCATION C41 ANECH CH AERO. RDG. ADH228 PAMB 29.5600 RELHUM 14.30

MODEL TEST POINT ACQUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. FREE-JET SPEED
 0100A 0113A

07/19/79 15.714

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-AMODL X01150
BACKGROUND FJB400-FMODL X05220

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250 77.7 80.8 80.8 81.6 82.2 83.6 85.8 86.5 90.7 97.1 102.0 106.5 106.1 140.0
315 78.9 80.7 81.7 82.0 83.3 85.8 86.1 88.3 92.9 99.5 103.4 108.3 104.0 140.8
400 80.5 81.8 83.1 82.6 83.8 85.8 86.8 89.3 93.7 103.0 106.4 110.3 102.5 142.3
500 79.9 82.2 85.0 84.2 85.0 87.2 88.1 90.3 94.8 104.4 107.3 109.4 98.6 142.3
630 74.8 83.1 84.8 85.1 89.2 88.6 89.8 92.7 97.4 105.2 107.4 107.5 94.4 141.9
800 83.8 82.9 85.4 86.9 87.5 89.9 90.8 94.2 99.4 106.3 106.6 105.1 92.5 141.7
1000 85.2 83.7 86.5 87.0 87.8 91.0 91.9 96.1 101.1 106.4 104.8 101.9 89.8 141.0
1250 84.8 87.2 88.4 89.4 89.7 92.1 93.5 97.2 101.4 106.3 105.6 100.1 89.4 141.3
1600 86.2 86.3 87.9 88.9 90.2 92.6 94.2 97.9 102.1 106.0 104.4 98.6 88.6 141.0
2000 85.2 86.5 88.3 89.3 90.1 92.4 94.3 98.3 102.5 105.9 103.3 98.0 89.0 140.9
2500 86.2 87.7 88.7 89.7 90.5 92.9 95.8 98.5 102.0 106.4 103.0 99.0 88.9 141.1
3150 86.8 87.6 88.6 90.1 91.4 93.8 95.9 99.6 102.6 105.0 102.9 99.1 88.8 140.9
4000 87.7 88.3 89.8 90.3 91.0 93.9 95.3 99.5 102.1 104.3 101.9 98.0 87.9 140.4
5000 86.9 88.0 88.8 90.2 90.7 93.9 96.3 99.7 101.6 104.8 102.1 97.7 88.6 140.7
6300 87.7 88.2 88.9 90.1 91.1 94.2 95.4 99.4 101.5 103.6 101.6 98.6 89.0 140.5
8000 91.2 90.6 89.5 90.1 91.1 93.2 94.8 98.4 101.0 102.9 100.8 98.9 90.4 140.3
10000 88.8 89.8 91.2 90.3 91.3 93.7 93.9 97.7 99.5 102.0 100.5 98.3 90.1 140.3
12500 85.7 87.5 89.3 90.1 90.9 92.3 92.5 95.9 97.5 99.7 98.3 98.0 89.2 139.2
16000 82.7 85.1 87.4 88.9 90.6 92.1 90.8 94.7 95.0 98.3 95.0 96.0 88.1 138.8
20000 78.0 82.4 83.5 85.3 89.3 90.1 88.5 91.4 93.2 94.1 91.9 92.1 85.8 137.6
25000 76.6 79.5 81.8 81.3 85.9 87.8 85.6 87.1 89.7 89.0 87.2 88.0 83.4 136.2
31500 74.6 74.4 78.3 80.6 80.9 81.7 81.8 83.6 86.4 86.3 83.7 82.4 77.7 135.5
40000 70.4 70.2 74.0 75.7 79.4 80.1 78.9 78.3 81.0 80.6 78.4 76.9 73.3 135.1
50000 64.0 65.3 66.9 69.8 72.0 73.0 71.7 71.9 75.7 73.3 72.0 71.4 67.3 133.1
63000 60.0 61.1 61.9 64.0 64.6 65.2 65.5 65.4 70.6 65.7 65.0 64.9 61.0 132.2
80000 54.3 63.4 56.5 59.9 58.8 60.4 60.2 59.7 63.5 58.8 58.9 56.2 53.1 132.9

6ASPL 98.7 99.6 100.8 101.5 102.7 104.9 106.2 109.8 112.9 117.1 116.7 117.4 109.9 134.1

TEST DATE 03-29-78
LOCATION C41 ANECH CH

TAPE NO. N313
AERO. RDG. ADH225

IALPHA SB59
PAMB 29.5600

TANB 58.46
RELHUM 12.50

MODEL TEST POINT
0100A 0115A

ACOUSTIC RANGE
12.2 M (40.0 FT)

SIZE
139.0 SQ CM (21.55 SQ IN)

FREE-JET SPEED
118.87 M/SEC (390.0 FPS)

07/19/79 15.714

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-AMODL X01150

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PHL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

OASPL

105.7

105.9

106.0

105.6

106.1

107.1

107.0

109.3

113.2

116.4

115.8

117.3

113.6

154.8

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 390.00 REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-29-78 TAPE NO. N313 ALPHA SB59 TAMB 56.46
 LOCATION C41 ANECH CH AERO. RDG. ADH225 PAMB 29.5600 RELHUM 12.50

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 118.87 M/SEC (390.0 FPS) FREE-JET SPEED

07/19/79 15.714

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-AMODL X01155

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 65.1 | 67.2 | 67.8 | 67.3 | 67.9 | 68.6 | 68.3 | 69.6 | 74.4 | 82.5 | 83.9 | 85.4 | 74.6 | 159.3 |
| 63 | 65.7 | 67.6 | 68.8 | 67.6 | 69.2 | 70.0 | 69.7 | 70.5 | 76.8 | 83.2 | 84.1 | 84.1 | 72.3 | 159.0 |
| 80 | 66.0 | 68.6 | 71.1 | 69.5 | 74.0 | 71.5 | 70.9 | 72.5 | 79.1 | 84.5 | 83.8 | 82.8 | 72.9 | 159.1 |
| 100 | 63.5 | 71.6 | 72.6 | 71.5 | 71.8 | 72.8 | 72.2 | 74.0 | 80.9 | 84.8 | 82.2 | 80.5 | 72.2 | 158.5 |
| 125 | 69.7 | 69.1 | 71.4 | 72.2 | 72.2 | 74.0 | 73.3 | 75.8 | 81.2 | 84.6 | 82.8 | 78.1 | 71.3 | 158.5 |
| 160 | 70.9 | 69.9 | 72.4 | 72.3 | 74.1 | 75.2 | 75.0 | 76.9 | 81.9 | 84.2 | 81.5 | 76.4 | 69.7 | 158.3 |
| 200 | 70.3 | 73.1 | 74.2 | 74.6 | 74.5 | 75.7 | 75.7 | 77.6 | 82.4 | 84.2 | 80.4 | 75.8 | 70.0 | 158.6 |
| 250 | 71.3 | 72.1 | 73.5 | 73.9 | 74.4 | 75.6 | 75.9 | 78.0 | 82.1 | 84.9 | 80.3 | 75.9 | 70.0 | 159.1 |
| 315 | 69.9 | 71.9 | 73.7 | 74.2 | 74.9 | 76.1 | 77.4 | 78.3 | 82.9 | 83.8 | 80.5 | 77.3 | 70.0 | 159.5 |
| 400 | 70.3 | 72.8 | 73.9 | 74.5 | 75.7 | 77.1 | 77.6 | 79.6 | 82.6 | 83.2 | 79.3 | 75.7 | 68.2 | 159.6 |
| 500 | 70.4 | 72.3 | 73.6 | 74.8 | 75.5 | 77.5 | 77.3 | 79.8 | 82.0 | 83.4 | 79.1 | 74.9 | 68.0 | 160.0 |
| 630 | 70.8 | 72.7 | 74.6 | 74.9 | 75.4 | 77.7 | 78.4 | 80.0 | 81.9 | 82.2 | 78.6 | 75.7 | 68.1 | 160.4 |
| 800 | 69.4 | 72.0 | 73.4 | 74.9 | 75.5 | 77.8 | 77.3 | 79.4 | 81.5 | 81.7 | 78.1 | 76.2 | 69.2 | 160.7 |
| 1000 | 69.6 | 71.7 | 73.2 | 74.4 | 75.2 | 76.7 | 76.7 | 78.5 | 80.2 | 80.9 | 77.8 | 76.3 | 68.0 | 160.9 |
| 1250 | 71.4 | 73.0 | 72.5 | 73.7 | 75.5 | 77.0 | 75.7 | 77.8 | 78.7 | 79.1 | 75.8 | 74.9 | 66.2 | 160.8 |
| 1600 | 68.9 | 72.0 | 74.4 | 73.6 | 74.7 | 75.3 | 74.4 | 76.0 | 76.7 | 77.8 | 72.3 | 71.8 | 63.0 | 160.5 |
| 2000 | 64.3 | 68.5 | 71.6 | 72.7 | 74.8 | 75.0 | 72.8 | 75.1 | 73.4 | 68.2 | 66.1 | 67.2 | 57.2 | 159.6 |
| 2500 | 61.8 | 66.7 | 70.1 | 71.6 | 72.9 | 72.5 | 70.1 | 71.4 | 69.4 | 65.9 | 60.7 | 58.4 | 49.1 | 158.5 |
| 3150 | 53.1 | 61.0 | 63.6 | 65.7 | 68.2 | 68.9 | 64.8 | 63.9 | 67.0 | 63.6 | 56.6 | 50.4 | 37.6 | 157.9 |
| 4000 | 44.7 | 52.6 | 57.3 | 57.7 | 59.7 | 59.8 | 58.8 | 58.9 | 56.7 | 51.9 | 43.9 | 35.0 | 17.8 | 156.2 |
| 5000 | 29.4 | 36.8 | 45.1 | 49.7 | 53.7 | 53.4 | 48.2 | 46.6 | 45.6 | 37.5 | 28.1 | 16.2 | | 155.8 |
| 6300 | 9.7 | 20.2 | 30.0 | 34.7 | 36.2 | 36.4 | 32.8 | 29.2 | 29.3 | 16.6 | 4.3 | | | 154.9 |
| 8000 | | | 0.6 | 8.6 | 10.1 | 10.9 | 9.5 | 3.4 | 2.8 | | | | | 153.7 |
| 10000 | | | | | | | | | | | | | | 152.9 |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|------|-------|------|------|------|-------|
| OASPL | 81.6 | 83.7 | 85.3 | 85.8 | 86.8 | 88.0 | 87.8 | 89.7 | 93.0 | 95.3 | 93.0 | 91.4 | 82.4 | 172.7 |
| PNL | 88.4 | 91.5 | 93.7 | 94.6 | 95.9 | 96.6 | 95.3 | 97.1 | 98.8 | 99.8 | 96.1 | 93.7 | 85.0 | |
| PNLT | 88.4 | 91.5 | 94.5 | 95.2 | 97.2 | 97.7 | 96.3 | 97.1 | 99.4 | 100.9 | 96.1 | 93.7 | 85.0 | |

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-29-78 TAPE NO. N313 ALPHA SB59 TAMB 58.46
LOCATION C41 ANECK CH AERO. RDG. ADH225 PAMB 29.5600 RELHUM 12.50

MODEL TEST POINT 0115A ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 118.87 M/SEC (390.0 FPS) FREE-JET SPEED

07/19/79 15.714

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-AMODL X01160
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

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TEST DATE 03-29-78

LOCATION C41 ANECH CH

TAPE NO. N313

AERO. RDG. ADH217

ALPHA SB59

PAMB 29.5600

TAMB 55.58

RELHUM 21.80

MODEL TEST POINT

0:00A 0116A

ACOUSTIC RANGE

12.2 M (40.0 FT)

SIZE

139.0 SQ CM (21.55 SQ IN)

- MODEL

0.

FREE-JET SPEED

M/SEC (O. FPS)

07/19/79 15.714

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-AR00L X01160

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PNL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | 82.8 | 87.1 | 87.1 | 87.6 | 87.7 | 90.1 | 93.0 | 95.1 | 97.1 | 103.4 | 108.3 | 114.3 | 111.1 | 146.0 |
| 63 | 84.1 | 86.7 | 87.2 | 88.2 | 90.3 | 92.2 | 92.8 | 95.2 | 98.7 | 105.6 | 109.6 | 116.3 | 111.7 | 147.6 |
| 80 | 86.2 | 87.4 | 88.0 | 88.5 | 89.8 | 92.2 | 93.1 | 95.5 | 100.2 | 109.5 | 112.7 | 117.6 | 112.3 | 149.4 |
| 100 | 86.5 | 88.5 | 90.0 | 90.6 | 91.2 | 93.3 | 94.4 | 96.6 | 101.0 | 110.6 | 114.0 | 118.7 | 113.1 | 150.5 |
| 125 | 88.1 | 90.1 | 91.1 | 91.2 | 93.3 | 94.6 | 95.8 | 97.9 | 103.1 | 111.2 | 114.6 | 119.3 | 113.7 | 151.2 |
| 160 | 90.9 | 90.4 | 92.2 | 93.5 | 93.8 | 95.9 | 96.8 | 100.7 | 104.7 | 111.0 | 114.1 | 119.5 | 114.5 | 151.3 |
| 200 | 95.7 | 94.7 | 96.0 | 94.8 | 94.6 | 96.8 | 97.9 | 101.5 | 106.0 | 111.3 | 113.2 | 119.4 | 114.6 | 151.3 |
| 250 | 93.1 | 95.1 | 96.9 | 97.4 | 97.7 | 99.9 | 99.7 | 102.7 | 107.1 | 112.5 | 114.1 | 120.0 | 114.7 | 152.0 |
| 315 | 94.1 | 93.8 | 95.3 | 96.0 | 96.9 | 98.8 | 99.9 | 103.3 | 107.5 | 111.6 | 113.6 | 119.0 | 114.3 | 151.4 |
| 400 | 96.1 | 97.1 | 98.6 | 95.9 | 96.0 | 98.1 | 99.7 | 102.9 | 107.6 | 111.5 | 112.7 | 118.4 | 111.9 | 150.6 |
| 500 | 94.3 | 95.6 | 96.8 | 97.3 | 97.7 | 98.8 | 100.7 | 104.1 | 107.3 | 112.4 | 113.4 | 117.6 | 110.1 | 150.5 |
| 630 | 96.1 | 96.9 | 96.4 | 97.2 | 97.3 | 99.4 | 101.0 | 104.9 | 107.9 | 111.3 | 113.5 | 116.4 | 108.4 | 150.0 |
| 800 | 95.5 | 96.4 | 96.9 | 96.4 | 95.7 | 99.1 | 100.4 | 104.6 | 107.2 | 109.8 | 112.4 | 114.3 | 108.1 | 149.8 |
| 1000 | 94.3 | 96.2 | 97.0 | 97.2 | 97.0 | 99.1 | 100.7 | 104.7 | 106.7 | 110.2 | 112.0 | 113.6 | 107.1 | 148.6 |
| 1250 | 93.0 | 96.2 | 97.8 | 97.4 | 97.4 | 99.3 | 100.2 | 104.2 | 106.1 | 109.0 | 110.4 | 112.9 | 106.8 | 148.0 |
| 1600 | 91.4 | 96.2 | 97.1 | 97.6 | 98.1 | 99.3 | 100.3 | 103.5 | 105.6 | 107.8 | 109.1 | 110.9 | 106.2 | 147.3 |
| 2000 | 88.6 | 92.9 | 95.8 | 96.6 | 97.9 | 99.7 | 99.4 | 102.8 | 104.1 | 106.6 | 107.3 | 109.8 | 104.8 | 146.6 |
| 2500 | 85.1 | 91.3 | 92.9 | 94.9 | 96.1 | 98.0 | 97.6 | 100.4 | 101.8 | 103.6 | 105.1 | 108.0 | 102.6 | 145.2 |
| 3150 | 82.9 | 86.6 | 91.1 | 86.6 | 91.1 | 92.4 | 89.5 | 90.9 | 94.7 | 94.0 | 95.2 | 98.7 | 95.7 | 142.3 |
| 4000 | 73.8 | 78.0 | 83.0 | 85.2 | 85.1 | 86.4 | 85.6 | 87.4 | 90.0 | 91.8 | 92.1 | 93.1 | 89.6 | 141.2 |
| 5000 | 68.6 | 72.9 | 77.5 | 79.8 | 83.7 | 84.6 | 80.7 | 82.8 | 85.2 | 86.2 | 87.3 | 87.9 | 84.8 | 140.7 |
| 6300 | 62.0 | 67.5 | 70.4 | 73.4 | 75.3 | 77.5 | 75.6 | 75.8 | 80.3 | 80.3 | 81.4 | 83.7 | 78.7 | 139.2 |
| 8000 | 56.5 | 61.6 | 64.4 | 67.1 | 67.1 | 69.8 | 70.1 | 69.5 | 73.6 | 73.6 | 76.2 | 77.7 | 74.0 | 138.5 |
| 10000 | 50.3 | 54.0 | 58.3 | 62.5 | 61.1 | 65.3 | 62.3 | 63.9 | 69.5 | 67.0 | 72.1 | 70.2 | 67.1 | 139.5 |
| GASPL | 105.2 | 106.8 | 107.9 | 108.2 | 108.9 | 110.7 | 111.5 | 115.0 | 118.1 | 122.7 | 125.0 | 129.6 | 124.2 | 162.5 |

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MODEL/FULL SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES
INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-29-78 TAPE NO. N313 ALPHA 3859 TAPS 55.58
LOCATION C41 ANECH CH AERO. RDG. ADH217 PARS 29.5600 RELHUM 21.8C

MODEL TEST POINT 0100A 0116A ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

07/19/79 15.714

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. 3L

IDENTIFICATION - FJ-ZER-AMODL X01165

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 64.8 | 67.7 | 70.3 | 70.5 | 72.3 | 74.8 | 75.8 | 77.5 | 81.5 | 89.7 | 91.3 | 94.1 | 85.4 | 167.5 |
| 63 | 65.1 | 68.7 | 71.3 | 72.6 | 73.6 | 75.6 | 76.8 | 78.6 | 82.3 | 90.8 | 92.6 | 95.1 | 86.2 | 168.6 |
| 80 | 66.7 | 70.3 | 72.4 | 73.1 | 75.6 | 77.1 | 78.1 | 80.9 | 84.4 | 91.4 | 93.4 | 95.7 | 86.7 | 169.3 |
| 100 | 69.4 | 70.5 | 73.3 | 75.4 | 76.1 | 78.4 | 79.1 | 82.6 | 85.8 | 91.1 | 92.6 | 95.8 | 87.3 | 169.5 |
| 125 | 74.1 | 74.7 | 77.1 | 76.6 | 76.9 | 79.1 | 80.1 | 83.4 | 87.1 | 91.3 | 91.6 | 95.5 | 87.4 | 169.4 |
| 160 | 71.3 | 74.9 | 77.8 | 79.1 | 79.9 | 82.1 | 81.9 | 84.4 | 88.1 | 92.3 | 92.3 | 95.9 | 86.9 | 170.1 |
| 200 | 72.1 | 73.4 | 76.1 | 77.6 | 78.9 | 80.9 | 81.9 | 84.8 | 88.3 | 91.2 | 91.8 | 94.6 | 86.0 | 169.5 |
| 250 | 73.7 | 76.5 | 77.2 | 77.2 | 77.7 | 80.0 | 81.5 | 84.2 | 88.2 | 90.8 | 90.3 | 93.5 | 83.0 | 169.8 |
| 315 | 71.5 | 74.6 | 77.1 | 78.4 | 79.2 | 80.4 | 82.2 | 85.1 | 87.6 | 91.5 | 90.6 | 92.1 | 80.4 | 168.7 |
| 400 | 72.8 | 75.5 | 76.3 | 77.9 | 78.5 | 80.7 | 82.2 | 85.7 | 87.8 | 89.9 | 90.2 | 90.3 | 77.7 | 168.1 |
| 500 | 71.8 | 74.6 | 76.5 | 76.8 | 77.6 | 80.1 | 81.4 | 85.1 | 86.7 | 88.0 | 88.7 | 87.6 | 76.4 | 166.9 |
| 630 | 70.0 | 74.0 | 76.2 | 77.3 | 77.6 | 79.9 | 81.4 | 84.8 | 85.9 | 88.0 | 87.7 | 86.2 | 74.3 | 166.8 |
| 800 | 68.3 | 73.7 | 76.7 | 77.3 | 77.8 | 79.9 | 80.6 | 84.1 | 85.0 | 86.4 | 85.7 | 84.8 | 72.9 | 166.1 |
| 1000 | 66.3 | 73.4 | 75.8 | 77.3 | 78.4 | 79.7 | 80.3 | 83.2 | 84.5 | 84.9 | 84.0 | 82.2 | 71.2 | 165.4 |
| 1250 | 62.9 | 69.7 | 74.3 | 76.1 | 78.0 | 79.0 | 79.3 | 82.3 | 83.4 | 81.7 | 80.2 | 68.4 | 68.4 | 164.7 |
| 1600 | 58.6 | 67.5 | 71.0 | 74.1 | 76.0 | 78.1 | 77.3 | 79.6 | 79.9 | 79.9 | 78.5 | 77.0 | 63.8 | 163.3 |
| 2000 | 55.3 | 64.3 | 69.1 | 72.4 | 75.0 | 76.9 | 75.7 | 78.1 | 77.0 | 78.1 | 75.8 | 73.0 | 58.9 | 162.9 |
| 2500 | 48.2 | 60.3 | 65.5 | 68.7 | 73.0 | 74.5 | 72.2 | 74.3 | 74.4 | 72.9 | 69.6 | 67.5 | 51.1 | 161.7 |
| 3150 | 43.0 | 54.9 | 60.0 | 63.3 | 68.8 | 70.5 | 67.3 | 67.6 | 69.6 | 65.9 | 62.5 | 58.3 | 40.6 | 160.4 |
| 4000 | 34.9 | 45.3 | 54.0 | 58.6 | 59.9 | 61.6 | 60.3 | 60.9 | 61.1 | 59.1 | 53.1 | 43.8 | 19.9 | 158.2 |
| 5000 | 19.9 | 32.5 | 42.3 | 47.8 | 53.5 | 55.0 | 50.5 | 50.9 | 50.1 | 45.9 | 38.6 | 24.9 | 158.8 | |
| 6300 | 13.0 | 23.2 | 30.7 | 35.0 | 35.0 | 35.0 | 33.0 | 33.0 | 35.2 | 33.0 | 25.7 | 15.0 | 157.3 | |
| 8000 | | | | | | | | | | | | | 156.6 | |
| 10000 | | | | | | | | | | | | | 157.7 | |

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|-------|------|------|------|------|------|-------|------|-------|-------|-------|-------|-------|------|-------|
| GASPL | 82.3 | 85.4 | 87.7 | 88.8 | 89.8 | 91.8 | 92.8 | 95.6 | 98.1 | 101.8 | 102.4 | 104.8 | 95.7 | 180.4 |
| PNL | 86.3 | 90.6 | 93.3 | 95.5 | 97.5 | 99.5 | 99.1 | 101.7 | 103.6 | 106.0 | 105.6 | 106.6 | 96.5 | |
| PNLT | 87.0 | 90.6 | 93.3 | 95.5 | 98.8 | 100.6 | 99.1 | 101.7 | 103.6 | 106.0 | 106.7 | 106.6 | 97.6 | |

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-29-78 TAPE NO. N313 IALPHA SB59 TAMB 55.58
LOCATION C41 ANECH CH AERO. RDG. ADH217 PAMB 29.5600 RELNUM 21.80

MODEL TEST POINT ACQUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)
0100A 0116A

07/19/79 15.714

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-AMODL X01170
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

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TEST DATE 03-29-76 TAPE NO. N313 IALPHA SB59 TAMB 53.42
LOCATION C41 ANECH CH AERO. RDG. AD1231 PAMB 29.5800 RELHUM 15.40

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
0100A 0117A 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 0. M/SEC (0. FPS)

07/19/79 15.714

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-AMODL X01170

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

60

80

100

125

150

180

200

250

315

400

500

630

800

1000

1250

1500

1800

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

GASPL

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MODEL/FULL SIZE SCALE FACTOR
INPUT 1.000 CALC. 1.000

FREE JET VELOCITY (FT/SEC)
FREE JET DIAMETER (IN)

REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

TEST DATE 03-29-78 TAPE NO. N313 ALPHA 5859 TAMB 53.42
LOCATION C41 ANECH CH AERO. RDG. ADH231 PAPB 29.5800 RELHUM 15.40

MODEL TEST POINT 0100A 0117A ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CH (21.55 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

07/19/79 15.714

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-AMODL X01175

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 64.6 | 68.2 | 69.5 | 70.5 | 72.0 | 74.5 | 76.0 | 77.6 | 81.5 | 89.6 | 91.1 | 93.3 | 85.4 | 167.1 |
| 63 | 64.9 | 68.7 | 71.6 | 73.1 | 73.6 | 76.1 | 76.6 | 79.1 | 82.3 | 90.6 | 92.7 | 94.4 | 85.9 | 168.2 |
| 80 | 66.2 | 70.0 | 72.4 | 73.1 | 75.2 | 77.2 | 78.1 | 80.9 | 84.9 | 91.1 | 93.0 | 94.7 | 86.4 | 168.7 |
| 100 | 69.7 | 70.5 | 73.4 | 75.6 | 75.9 | 78.4 | 79.4 | 82.1 | 86.4 | 91.4 | 92.7 | 94.8 | 86.8 | 169.0 |
| 125 | 73.4 | 73.8 | 76.4 | 76.2 | 76.9 | 79.2 | 80.7 | 82.9 | 87.4 | 91.1 | 91.4 | 94.0 | 86.2 | 168.5 |
| 160 | 70.6 | 75.2 | 78.1 | 78.4 | 79.7 | 81.2 | 81.9 | 84.2 | 87.9 | 91.1 | 92.3 | 95.2 | 86.2 | 169.5 |
| 200 | 72.4 | 73.5 | 75.6 | 76.9 | 78.7 | 80.7 | 81.9 | 85.2 | 88.1 | 91.3 | 90.9 | 94.2 | 85.6 | 169.1 |
| 250 | 72.6 | 75.1 | 77.0 | 77.3 | 77.6 | 79.9 | 81.6 | 85.1 | 88.5 | 90.7 | 89.7 | 92.6 | 82.9 | 168.3 |
| 315 | 71.4 | 74.2 | 77.0 | 78.0 | 78.6 | 80.8 | 82.3 | 85.0 | 87.5 | 90.6 | 90.0 | 92.0 | 80.7 | 168.4 |
| 400 | 72.2 | 75.2 | 76.0 | 77.6 | 78.3 | 81.1 | 82.1 | 85.6 | 88.0 | 89.4 | 89.9 | 90.2 | 77.8 | 167.9 |
| 500 | 70.9 | 74.0 | 76.1 | 76.7 | 78.2 | 80.7 | 81.2 | 84.9 | 86.6 | 87.7 | 89.3 | 87.5 | 76.5 | 167.0 |
| 630 | 69.6 | 73.6 | 75.7 | 76.6 | 77.4 | 79.7 | 81.7 | 84.8 | 86.2 | 87.6 | 87.8 | 85.5 | 74.1 | 166.5 |
| 800 | 67.7 | 72.3 | 75.3 | 76.7 | 78.0 | 80.5 | 81.3 | 84.2 | 84.9 | 86.5 | 85.6 | 84.7 | 73.1 | 166.1 |
| 1000 | 65.9 | 72.7 | 74.9 | 76.2 | 77.3 | 79.4 | 79.8 | 82.6 | 84.1 | 84.7 | 83.3 | 82.1 | 70.1 | 165.0 |
| 1250 | 62.6 | 69.9 | 74.4 | 75.5 | 77.2 | 79.0 | 79.0 | 81.7 | 82.4 | 83.2 | 81.6 | 80.4 | 67.6 | 164.5 |
| 1600 | 58.5 | 66.4 | 71.1 | 73.3 | 75.5 | 77.3 | 76.6 | 79.5 | 79.5 | 79.4 | 77.4 | 76.8 | 62.8 | 162.8 |
| 2000 | 54.7 | 63.7 | 68.3 | 71.4 | 74.3 | 76.0 | 74.7 | 76.6 | 76.7 | 77.1 | 73.7 | 73.1 | 57.8 | 162.1 |
| 2500 | 47.9 | 59.3 | 64.2 | 68.0 | 72.1 | 73.7 | 71.1 | 73.1 | 73.2 | 71.5 | 68.6 | 67.0 | 49.8 | 160.7 |
| 3150 | 42.1 | 53.2 | 58.4 | 62.0 | 67.6 | 69.3 | 66.3 | 66.6 | 68.5 | 64.7 | 61.0 | 57.9 | 38.7 | 159.3 |
| 4000 | 33.9 | 43.8 | 52.1 | 57.1 | 59.1 | 60.3 | 59.3 | 59.3 | 60.3 | 57.4 | 52.0 | 43.0 | 18.5 | 158.2 |
| 5000 | 19.2 | 30.6 | 40.9 | 45.9 | 52.4 | 53.4 | 49.4 | 49.7 | 49.1 | 44.4 | 37.2 | 23.9 | 157.5 | |
| 6300 | | | | | | | | | | | | | | 155.9 |
| 8000 | | | | | | | | | | | | | | 155.3 |
| 10000 | | | | | | | | | | | | | | 156.1 |

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|-------|------|------|------|------|------|-------|------|-------|-------|-------|-------|-------|------|-------|
| QASPL | 61.9 | 64.9 | 67.3 | 68.3 | 69.5 | 91.7 | 92.6 | 95.8 | 98.2 | 101.5 | 102.2 | 104.0 | 95.2 | 179.9 |
| PWL | 85.5 | 90.1 | 92.9 | 94.7 | 96.9 | 98.9 | 98.7 | 101.4 | 103.5 | 105.4 | 105.2 | 106.1 | 96.1 | |
| PNLT | 86.3 | 90.1 | 92.9 | 95.3 | 98.3 | 100.1 | 98.7 | 101.4 | 104.1 | 105.4 | 105.2 | 106.1 | 97.1 | |

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-29-78 TAPE NO. N313 ALPHA SB59 TAMP 53.42
LOCATION C41 ANECH CH AERG. RDG. ADH231 PAMB 29.5800 RELHUM 15.40

MODEL TEST POINT ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CH (1400.03 SQ IN) - FULL 0. FREE-JET SPEED
0100A 0.17A 0. M/SEC (0. FPS)

07/19/79 15.714

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-AMODL X01180
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

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TEST DATE 03-29-78
LOCATION C41 ANECH CH

TAPE NO. N313
AERG. RDG. ADH230

IALPHA SB39
PAMB 29.5300

TAMB 53.42
RELHUM 15.40

MODEL TEST POINT
0100A 0118A

ACOUSTIC RANGE
12.2 M (40.0 FT) ARC

SIZE
21.55 SQ IN) - MODEL

FREE-JET SPEED
O. M/SEC (O. FPS)

07/19/79 15.714

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-AMODL X01185

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 65.3 | 66.4 | 70.8 | 71.0 | 72.8 | 75.0 | 76.3 | 76.5 | 82.0 | 90.3 | 91.6 | 94.6 | 86.2 | 168.0 |
| 63 | 65.6 | 69.5 | 71.6 | 72.6 | 73.8 | 76.6 | 77.6 | 79.1 | 83.1 | 91.3 | 93.2 | 95.1 | 85.9 | 168.8 |
| 80 | 67.0 | 70.5 | 72.9 | 73.9 | 75.7 | 77.9 | 78.6 | 81.6 | 85.4 | 92.1 | 94.0 | 95.7 | 87.2 | 169.6 |
| 100 | 70.7 | 71.0 | 74.6 | 75.9 | 76.4 | 78.9 | 80.1 | 83.1 | 86.9 | 91.9 | 93.2 | 95.8 | 87.6 | 169.7 |
| 125 | 74.4 | 75.5 | 77.4 | 77.2 | 77.7 | 79.9 | 80.9 | 84.4 | 88.6 | 92.1 | 92.2 | 93.5 | 87.4 | 169.7 |
| 160 | 72.3 | 76.0 | 79.1 | 79.9 | 80.2 | 81.9 | 83.2 | 85.9 | 89.1 | 93.4 | 94.1 | 96.4 | 87.4 | 171.0 |
| 200 | 72.9 | 74.0 | 76.9 | 78.7 | 79.7 | 81.7 | 82.9 | 86.2 | 90.6 | 93.6 | 94.6 | 96.9 | 86.9 | 171.3 |
| 250 | 74.3 | 76.8 | 77.5 | 78.1 | 78.6 | 80.9 | 82.3 | 85.6 | 90.0 | 92.0 | 91.7 | 93.9 | 83.4 | 169.6 |
| 315 | 72.6 | 75.7 | 78.5 | 79.0 | 79.6 | 81.3 | 83.3 | 86.3 | 88.7 | 92.1 | 92.2 | 92.0 | 80.7 | 169.3 |
| 400 | 73.5 | 75.9 | 77.0 | 78.8 | 79.1 | 81.9 | 82.8 | 86.1 | 89.2 | 91.1 | 92.1 | 89.7 | 78.3 | 168.9 |
| 500 | 72.4 | 75.0 | 76.6 | 77.7 | 78.7 | 81.0 | 82.7 | 86.2 | 87.3 | 89.9 | 90.1 | 87.2 | 76.0 | 167.7 |
| 630 | 70.8 | 73.8 | 76.2 | 77.8 | 78.7 | 80.7 | 82.2 | 85.6 | 87.0 | 89.3 | 88.5 | 85.5 | 74.4 | 167.3 |
| 800 | 68.7 | 70.6 | 76.1 | 77.4 | 78.5 | 81.2 | 82.0 | 84.5 | 86.2 | 87.5 | 86.1 | 83.4 | 72.6 | 166.4 |
| 1000 | 66.4 | 73.2 | 75.9 | 77.0 | 78.3 | 79.9 | 80.5 | 83.8 | 85.1 | 86.0 | 83.8 | 81.1 | 70.1 | 165.5 |
| 1250 | 63.4 | 70.6 | 74.1 | 76.3 | 77.7 | 80.3 | 79.7 | 82.5 | 83.7 | 84.2 | 82.1 | 78.9 | 67.4 | 164.8 |
| 1600 | 58.9 | 67.2 | 70.8 | 73.5 | 76.2 | 78.3 | 77.3 | 79.8 | 80.2 | 80.6 | 77.9 | 75.3 | 63.3 | 163.0 |
| 2000 | 55.9 | 64.7 | 69.3 | 71.4 | 74.3 | 77.0 | 75.2 | 78.1 | 77.4 | 78.6 | 74.5 | 71.4 | 57.8 | 162.4 |
| 2500 | 48.4 | 60.3 | 65.0 | 68.8 | 72.1 | 74.2 | 71.9 | 73.9 | 73.9 | 73.0 | 69.1 | 65.2 | 49.3 | 160.9 |
| 3150 | 44.1 | 54.7 | 59.4 | 63.0 | 66.6 | 69.6 | 68.6 | 68.8 | 68.8 | 65.7 | 61.0 | 56.1 | 39.2 | 159.4 |
| 4000 | 35.4 | 45.3 | 53.4 | 58.1 | 59.9 | 61.1 | 59.8 | 60.6 | 61.4 | 58.7 | 52.3 | 41.8 | 17.8 | 158.7 |
| 5000 | 21.2 | 32.3 | 41.9 | 47.7 | 52.6 | 54.4 | 49.9 | 50.2 | 49.6 | 45.4 | 37.9 | 22.1 | 158.0 | |
| 6300 | | | | | | | | | | | | | 155.4 | |
| 8000 | | | | | | | | | | | | | 155.6 | |
| 10000 | | | | | | | | | | | | | 156.8 | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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|-------|------|------|------|------|------|-------|------|-------|-------|-------|-------|-------|------|-------|
| GASPL | 83.0 | 85.9 | 86.2 | 89.3 | 90.3 | 92.5 | 93.4 | 96.5 | 99.4 | 102.9 | 103.5 | 105.0 | 96.0 | 180.9 |
| PWL | 87.0 | 91.0 | 93.5 | 95.4 | 97.4 | 98.8 | 99.4 | 102.2 | 104.7 | 106.9 | 106.8 | 106.8 | 96.8 | |
| PNLT | 87.0 | 91.0 | 93.5 | 95.4 | 98.6 | 100.9 | 92.4 | 102.2 | 105.2 | 106.9 | 107.8 | 106.8 | 98.1 | |

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-29-78 TAPE NO. N313 ALPHA SB59 TAMP 53.42
LOCATION C41 ANECH CH AERO. RDG. ADH230 PAMB 29.5800 RELHUM 15.40

MODEL TEST POINT 0100A 0118A ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)

07/19/79 15.714

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-AMODL X01190
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

FREQ

50

63

80

100

125

160

200

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 63.3 | 67.8 | 67.3 | 68.1 | 67.5 | 90.1 | 92.7 | 95.4 | 97.1 | 103.9 | 108.0 | 114.5 | 111.1 | 146.0 |
| 315 | 84.4 | 86.2 | 87.4 | 88.7 | 90.1 | 92.7 | 93.3 | 95.7 | 99.2 | 106.8 | 109.9 | 115.8 | 112.0 | 147.5 |
| 400 | 86.2 | 87.7 | 89.2 | 89.0 | 90.3 | 92.5 | 93.6 | 96.0 | 105.2 | 110.3 | 112.9 | 117.6 | 112.5 | 149.6 |
| 500 | 86.7 | 89.3 | 90.3 | 90.8 | 91.4 | 94.0 | 94.9 | 97.6 | 101.5 | 111.4 | 114.3 | 117.9 | 112.6 | 150.3 |
| 630 | 88.1 | 90.4 | 91.2 | 92.2 | 93.6 | 94.9 | 96.3 | 99.7 | 103.9 | 112.0 | 114.9 | 119.3 | 113.9 | 151.4 |
| 800 | 91.6 | 90.9 | 92.7 | 93.5 | 94.3 | 96.4 | 97.3 | 101.2 | 105.9 | 112.8 | 115.4 | 119.3 | 114.2 | 151.8 |
| 1000 | 96.5 | 94.8 | 96.1 | 95.1 | 95.7 | 97.3 | 98.7 | 101.8 | 107.3 | 112.1 | 113.5 | 119.2 | 114.3 | 151.4 |
| 1250 | 93.4 | 95.9 | 97.9 | 98.0 | 98.3 | 100.2 | 100.0 | 103.5 | 107.9 | 113.3 | 116.1 | 120.8 | 115.0 | 153.0 |
| 1600 | 94.5 | 94.6 | 95.4 | 96.4 | 97.2 | 99.8 | 100.5 | 104.1 | 108.6 | 113.0 | 115.4 | 119.9 | 114.1 | 152.3 |
| 2000 | 95.9 | 96.7 | 97.0 | 96.5 | 96.8 | 98.7 | 100.3 | 104.3 | 108.5 | 112.6 | 114.8 | 118.7 | 112.0 | 151.5 |
| 2500 | 94.9 | 96.5 | 97.5 | 97.5 | 98.0 | 99.4 | 101.8 | 105.0 | 108.2 | 113.4 | 115.0 | 117.7 | 110.7 | 151.3 |
| 3150 | 96.2 | 97.1 | 96.8 | 97.3 | 97.9 | 100.3 | 101.9 | 105.6 | 108.6 | 112.8 | 115.4 | 116.5 | 109.0 | 151.0 |
| 4000 | 95.6 | 96.5 | 97.3 | 97.3 | 97.6 | 99.7 | 101.6 | 105.5 | 108.0 | 111.5 | 113.8 | 114.2 | 107.7 | 149.6 |
| 5000 | 94.8 | 96.2 | 97.0 | 97.2 | 97.8 | 100.1 | 101.8 | 105.7 | 107.3 | 112.2 | 113.0 | 113.9 | 107.4 | 149.6 |
| 6300 | 93.4 | 96.6 | 97.4 | 97.1 | 97.6 | 100.2 | 101.1 | 104.8 | 106.5 | 111.1 | 111.3 | 112.5 | 106.7 | 148.6 |
| 8000 | 91.9 | 96.1 | 97.2 | 97.0 | 97.6 | 99.5 | 100.8 | 103.6 | 105.9 | 109.1 | 109.8 | 110.6 | 105.4 | 147.6 |
| 10000 | 86.6 | 93.3 | 95.7 | 96.2 | 98.1 | 99.5 | 99.4 | 102.9 | 104.5 | 107.4 | 107.7 | 109.7 | 104.1 | 146.8 |
| 12500 | 85.9 | 90.7 | 92.8 | 94.1 | 96.4 | 97.5 | 97.5 | 100.9 | 102.2 | 104.9 | 105.0 | 107.0 | 101.9 | 145.2 |
| 16000 | 83.4 | 89.1 | 91.8 | 92.7 | 95.1 | 97.1 | 95.3 | 98.9 | 99.5 | 102.7 | 102.5 | 104.2 | 99.9 | 144.3 |
| 20000 | 77.7 | 85.9 | 87.7 | 89.7 | 93.0 | 94.6 | 92.5 | 95.6 | 96.6 | 98.6 | 99.2 | 101.0 | 96.6 | 143.0 |
| 25000 | 76.3 | 82.2 | 84.5 | 85.6 | 90.1 | 91.8 | 89.1 | 90.1 | 93.9 | 93.7 | 94.6 | 97.0 | 94.1 | 141.4 |
| 31500 | 73.6 | 77.8 | 82.0 | 84.4 | 84.9 | 85.9 | 85.1 | 87.1 | 90.1 | 91.2 | 91.9 | 91.1 | 89.4 | 140.6 |
| 40000 | 69.4 | 72.1 | 77.0 | 79.2 | 82.9 | 83.8 | 79.7 | 81.5 | 84.3 | 86.0 | 87.1 | 86.4 | 84.5 | 140.0 |
| 50000 | 62.5 | 67.0 | 68.9 | 73.3 | 74.4 | 77.4 | 74.9 | 75.1 | 79.2 | 79.8 | 81.2 | 80.9 | 78.7 | 138.3 |
| 63000 | 57.4 | 62.0 | 63.4 | 67.2 | 66.8 | 70.9 | 69.0 | 68.6 | 74.3 | 72.5 | 75.2 | 75.4 | 73.7 | 137.6 |
| 80000 | 51.0 | 54.6 | 57.2 | 63.8 | 60.0 | 67.1 | 61.2 | 62.7 | 68.1 | 66.5 | 71.3 | 67.6 | 66.3 | 138.9 |

OASPL 105.6 107.1 108.1 108.3 109.2 111.1 112.1 115.7 118.8 123.9 126.0 129.7 124.2 163.0

TEST DATE 03-29-78

LOCATION C41 ANECH CH

TAPE NO. N313

AERG. RDG. ADH229

ALPHA SB59

PAMB 29.5800

TAMB 53.42

RELHUM 15.40

MODEL TEST POINT

0100A 0119A

ACOUSTIC RANGE

12.2 M (40.0 FT)

ARC 139.0 SQ CM (

21.55 SQ IN) - MODEL

SIZE

0. M/SEC (

FREE-JET SPEED

0. FPS)

07/19/79 15.714

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-AMODL X01190

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PVL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

CASPL

105.6

107.1

108.1

108.3

109.2

111.1

112.1

115.7

118.8

123.9

126.0

129.7

142.2

163.0

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-29-78 TAPE NO. N313 ALPHA SB59 TAMB 53.42
 LOCATION C41 ANECH CH AERO. RDG. ADH229 PAMB 29.5600 RELHUM 15.40

MODEL TEST POINT 0100A 0119A ACOUSTIC RANGE 12.2 H (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

07/19/79 15.714

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-MODL X01195

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PNL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 64.6 | 67.9 | 70.5 | 71.0 | 72.6 | 75.0 | 76.0 | 76.0 | 81.5 | 90.5 | 91.6 | 94.1 | 85.7 | 167.7 |
| 63 | 65.4 | 69.5 | 71.8 | 72.6 | 73.6 | 76.6 | 77.3 | 79.6 | 82.6 | 91.6 | 92.9 | 94.4 | 85.7 | 168.4 |
| 80 | 66.7 | 70.5 | 72.4 | 74.1 | 76.2 | 77.4 | 78.8 | 81.6 | 85.1 | 92.1 | 93.5 | 95.7 | 86.9 | 169.5 |
| 100 | 70.2 | 71.0 | 73.9 | 75.4 | 76.6 | 78.9 | 79.6 | 83.1 | 87.1 | 92.9 | 93.9 | 95.6 | 87.1 | 169.9 |
| 125 | 74.9 | 74.6 | 77.1 | 76.9 | 77.9 | 79.7 | 80.9 | 83.7 | 86.4 | 92.1 | 91.9 | 95.3 | 86.9 | 169.5 |
| 160 | 71.6 | 75.7 | 78.9 | 79.7 | 80.4 | 82.4 | 82.2 | 85.2 | 88.9 | 93.1 | 94.3 | 96.7 | 87.2 | 171.1 |
| 200 | 72.4 | 74.2 | 76.1 | 77.9 | 79.2 | 81.9 | 82.4 | 85.7 | 89.4 | 92.6 | 93.4 | 95.4 | 85.9 | 170.4 |
| 250 | 73.6 | 75.1 | 77.5 | 77.8 | 78.4 | 80.6 | 82.1 | 85.6 | 89.0 | 92.0 | 92.4 | 93.9 | 83.1 | 169.6 |
| 315 | 72.1 | 75.5 | 77.7 | 78.5 | 79.6 | 81.1 | 83.3 | 86.0 | 88.5 | 92.4 | 92.2 | 92.3 | 81.0 | 169.4 |
| 400 | 73.0 | 75.7 | 78.7 | 78.1 | 79.1 | 81.6 | 83.1 | 86.3 | 88.7 | 91.4 | 92.1 | 90.5 | 78.3 | 169.1 |
| 500 | 71.9 | 74.7 | 76.8 | 77.7 | 78.5 | 80.7 | 82.5 | 85.9 | 87.6 | 89.7 | 90.1 | 87.5 | 76.0 | 167.7 |
| 630 | 70.6 | 74.1 | 76.2 | 77.3 | 78.4 | 80.9 | 82.2 | 85.8 | 86.5 | 90.1 | 88.8 | 86.5 | 74.6 | 167.7 |
| 800 | 68.7 | 74.1 | 76.3 | 76.9 | 78.0 | 80.7 | 81.5 | 84.7 | 85.4 | 88.5 | 86.6 | 84.4 | 72.8 | 166.8 |
| 1000 | 66.7 | 73.2 | 75.9 | 76.7 | 77.8 | 79.9 | 81.0 | 83.7 | 84.6 | 86.2 | 84.6 | 81.9 | 70.4 | 165.7 |
| 1250 | 62.9 | 70.1 | 74.2 | 75.6 | 78.2 | 79.8 | 79.5 | 82.5 | 83.0 | 84.2 | 82.1 | 80.1 | 67.6 | 165.0 |
| 1600 | 59.4 | 66.9 | 70.8 | 73.3 | 76.2 | 77.6 | 77.9 | 80.0 | 80.2 | 81.1 | 78.5 | 76.0 | 63.1 | 163.3 |
| 2000 | 55.9 | 64.7 | 69.3 | 71.6 | 74.6 | 77.0 | 74.9 | 77.9 | 77.2 | 78.4 | 75.0 | 71.6 | 58.0 | 162.5 |
| 2500 | 48.4 | 60.3 | 64.5 | 68.0 | 72.1 | 74.0 | 71.8 | 73.9 | 73.4 | 73.0 | 69.9 | 66.2 | 49.8 | 161.1 |
| 3150 | 43.6 | 54.2 | 59.4 | 62.3 | 67.9 | 69.6 | 68.6 | 68.6 | 68.8 | 65.7 | 62.0 | 56.6 | 38.9 | 159.5 |
| 4000 | 34.7 | 45.1 | 53.1 | 57.8 | 59.6 | 61.1 | 59.8 | 60.6 | 61.2 | 58.5 | 53.0 | 41.8 | 19.8 | 158.8 |
| 5000 | 20.7 | 31.6 | 41.9 | 47.2 | 52.6 | 54.2 | 49.4 | 49.5 | 49.1 | 45.7 | 38.4 | 23.4 | | 156.1 |
| 6300 | | | | | | | | | | | | | | 156.4 |
| 8000 | | | | | | | | | | | | | | 155.8 |
| 10000 | | | | | | | | | | | | | | 157.0 |

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|-------|------|------|------|------|------|-------|------|-------|-------|-------|-------|-------|------|-------|
| GASPL | 82.7 | 65.7 | 67.9 | 66.9 | 90.2 | 92.3 | 93.2 | 96.3 | 98.9 | 103.0 | 103.5 | 104.9 | 95.6 | 180.9 |
| PNL | 86.6 | 90.6 | 93.4 | 95.2 | 97.5 | 99.6 | 99.5 | 102.2 | 104.2 | 107.0 | 106.9 | 106.8 | 96.4 | |
| PNLT | 87.3 | 90.6 | 93.4 | 95.2 | 98.6 | 100.7 | 99.6 | 102.2 | 104.7 | 107.0 | 107.9 | 106.6 | 96.4 | |

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-29-78 TAPE NO. N313 ALPHA S859 TAPB 63.42
LOCATION C41 ANECH CH AERO. RDG. ADH229 PAMB 29.5600 RELNUM 15.40

MODEL TEST POINT ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE FREE-JET SPEED
0100A 0119A 0. M/SEC (O. FPS)

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-AMODL X01210
 BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

FREQ
50
63
80
100
125
160
200

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| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 55.6 | 90.6 | 90.3 | 91.1 | 90.6 | 93.3 | 95.7 | 96.4 | 100.3 | 107.4 | 111.5 | 116.2 | 118.1 | 149.7 |
| 315 | 56.9 | 89.4 | 90.2 | 91.0 | 93.1 | 95.4 | 95.6 | 97.7 | 102.4 | 109.5 | 113.6 | 119.8 | 115.7 | 151.3 |
| 400 | 56.4 | 90.7 | 92.2 | 91.5 | 92.6 | 95.2 | 96.3 | 96.7 | 104.0 | 113.8 | 116.9 | 121.6 | 115.8 | 153.4 |
| 500 | 59.5 | 91.8 | 93.8 | 93.6 | 93.9 | 96.8 | 97.4 | 99.8 | 105.3 | 115.6 | 118.7 | 122.4 | 116.6 | 154.6 |
| 630 | 91.3 | 93.6 | 94.6 | 94.9 | 96.5 | 97.9 | 98.8 | 101.9 | 107.6 | 116.5 | 119.8 | 122.5 | 117.7 | 155.3 |
| 800 | 95.3 | 94.1 | 95.7 | 96.9 | 96.5 | 98.9 | 100.0 | 103.9 | 109.4 | 116.7 | 120.1 | 123.8 | 118.7 | 156.1 |
| 1000 | 99.2 | 99.5 | 99.5 | 98.3 | 98.6 | 101.0 | 101.4 | 105.0 | 110.2 | 116.8 | 119.9 | 123.6 | 118.3 | 156.1 |
| 1250 | 97.3 | 100.6 | 101.8 | 101.6 | 101.7 | 103.3 | 103.7 | 106.4 | 111.1 | 116.2 | 121.0 | 124.2 | 117.6 | 156.6 |
| 1600 | 97.6 | 97.7 | 99.0 | 99.5 | 100.3 | 102.4 | 103.6 | 106.5 | 111.7 | 116.5 | 121.0 | 123.0 | 116.2 | 156.1 |
| 2000 | 99.5 | 100.3 | 100.0 | 100.0 | 99.4 | 102.0 | 102.9 | 107.0 | 112.3 | 116.9 | 120.3 | 120.5 | 113.0 | 155.0 |
| 2500 | 101.6 | 101.4 | 101.4 | 100.9 | 100.8 | 102.1 | 104.3 | 107.7 | 112.2 | 117.8 | 120.0 | 118.7 | 111.2 | 154.6 |
| 3150 | 103.2 | 102.2 | 102.0 | 101.1 | 103.2 | 104.8 | 108.7 | 112.7 | 117.1 | 118.0 | 117.5 | 109.7 | 153.8 | |
| 4000 | 101.5 | 102.8 | 103.8 | 102.8 | 102.2 | 103.0 | 103.9 | 108.6 | 111.8 | 116.0 | 116.6 | 115.3 | 108.3 | 152.7 |
| 5000 | 100.0 | 101.3 | 102.8 | 103.8 | 103.4 | 104.2 | 105.1 | 108.8 | 111.3 | 116.5 | 116.1 | 114.5 | 107.3 | 152.8 |
| 6300 | 98.7 | 100.8 | 101.8 | 102.8 | 103.6 | 105.7 | 105.3 | 108.6 | 111.2 | 115.5 | 114.8 | 113.5 | 107.2 | 152.2 |
| 8000 | 97.4 | 100.4 | 101.0 | 101.6 | 103.1 | 105.0 | 105.5 | 107.9 | 110.7 | 114.1 | 113.5 | 112.1 | 105.7 | 151.6 |
| 10000 | 95.7 | 99.0 | 101.4 | 101.7 | 103.5 | 105.6 | 104.5 | 107.6 | 109.5 | 113.7 | 112.2 | 110.9 | 105.5 | 151.4 |
| 12500 | 92.8 | 97.5 | 99.9 | 101.1 | 102.1 | 103.7 | 103.4 | 106.3 | 107.5 | 111.4 | 110.3 | 108.9 | 103.1 | 150.4 |
| 16000 | 90.5 | 95.9 | 98.5 | 99.6 | 102.2 | 103.4 | 101.9 | 104.9 | 106.1 | 110.8 | 108.2 | 107.2 | 101.9 | 150.5 |
| 20000 | 84.8 | 92.9 | 94.7 | 97.1 | 100.5 | 101.8 | 99.0 | 102.2 | 103.9 | 107.2 | 105.6 | 104.3 | 99.7 | 149.5 |
| 25000 | 83.4 | 90.2 | 92.0 | 93.5 | 97.7 | 98.3 | 96.1 | 97.3 | 101.1 | 102.8 | 101.7 | 100.2 | 97.7 | 148.2 |
| 31500 | 81.2 | 85.6 | 90.0 | 92.3 | 91.6 | 93.1 | 92.1 | 94.0 | 97.8 | 100.7 | 98.5 | 95.3 | 92.2 | 148.0 |
| 40000 | 76.6 | 80.5 | 84.9 | 86.7 | 90.3 | 91.4 | 87.3 | 89.5 | 93.2 | 96.7 | 93.9 | 90.7 | 87.7 | 147.9 |
| 50000 | 69.2 | 75.9 | 77.8 | 80.6 | 82.6 | 83.8 | 82.5 | 83.0 | 88.4 | 90.3 | 89.2 | 85.7 | 82.1 | 146.4 |
| 63000 | 64.1 | 70.7 | 72.0 | 74.5 | 74.4 | 76.0 | 77.1 | 77.1 | 84.2 | 84.9 | 83.5 | 80.1 | 77.5 | 146.2 |
| 80000 | 58.3 | 63.7 | 66.2 | 70.0 | 68.2 | 70.5 | 69.1 | 71.8 | 79.9 | 79.9 | 78.2 | 74.0 | 71.0 | 147.9 |
| QASPL | 110.6 | 112.0 | 112.9 | 113.1 | 113.8 | 115.5 | 115.8 | 119.1 | 122.8 | 128.2 | 130.6 | 132.9 | 127.2 | 167.1 |

TEST DATE 03-29-78 TAPE NO. N313 ALPHA SB59 TAMB 53.60
 LOCATION C41 ANECH CH AERO. RDG. ADH213 PAMB 29.5500 RELHUM 39.70

MODEL TEST POINT 0100A 0121A ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

07/19/79 15.714

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.6 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-AMODL X01210

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

60

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

110.6

112.0

113.1

113.8

115.5

115.8

119.1

122.8

128.2

130.6

132.9

127.2

167.1

ORIGINAL PAGE IS
OF POOR QUALITYMODEL/FULL SIZE SCALE FACTOR
INPUT 1.000 CALC. 1.000FREE JET VELOCITY (FT/SEC)
FREE JET DIAMETER (IN)FREE JET DIAMETER (IN)
FREE JET DIAMETER (IN)REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

TEST DATE 03-29-78
LOCATION C41 ANECH CH
TAPE NO. N313
AERO. RDG. ADH213
ALPHA SB59
PAMB 29.5500
TAMB 53.60
RELHUM 39.70

MODEL TEST POINT 0100A 0121A
ACCUSTIC RANGE 12.2 M (40.0 FT)
ARC 139.0 SQ CM (21.55 SQ IN)
SIZE 0. MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

07/19/79 15.7:4

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, S8 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-AMODL X01215

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|-------|------|-------|
| 50 | 67.1 | 70.9 | 73.5 | 73.5 | 75.0 | 77.8 | 78.8 | 80.8 | 85.3 | 94.0 | 95.6 | 98.1 | 88.9 | 171.5 |
| 63 | 68.1 | 72.0 | 75.1 | 75.6 | 76.3 | 79.3 | 79.8 | 81.8 | 86.6 | 95.8 | 97.4 | 98.9 | 89.7 | 172.8 |
| 80 | 69.9 | 73.8 | 75.9 | 76.9 | 78.9 | 80.4 | 81.1 | 83.9 | 88.9 | 96.6 | 98.4 | 98.9 | 90.7 | 173.4 |
| 100 | 73.9 | 74.2 | 76.8 | 76.8 | 78.9 | 81.4 | 82.3 | 85.8 | 90.6 | 96.6 | 98.6 | 100.1 | 91.5 | 174.3 |
| 125 | 77.6 | 79.5 | 80.6 | 80.1 | 80.9 | 83.4 | 83.6 | 86.8 | 91.3 | 96.8 | 98.4 | 99.7 | 90.9 | 174.2 |
| 160 | 75.5 | 80.4 | 82.8 | 83.3 | 83.8 | 85.6 | 85.8 | 88.1 | 92.0 | 96.0 | 99.3 | 100.1 | 89.9 | 174.7 |
| 200 | 75.6 | 77.3 | 79.7 | 81.0 | 82.3 | 84.6 | 85.5 | 88.0 | 92.5 | 96.2 | 99.0 | 98.5 | 88.0 | 174.2 |
| 250 | 77.1 | 79.5 | 81.6 | 81.4 | 81.2 | 83.9 | 84.7 | 88.4 | 92.8 | 96.2 | 98.0 | 95.7 | 84.2 | 173.1 |
| 315 | 78.9 | 80.4 | 81.7 | 82.0 | 82.3 | 83.8 | 86.8 | 88.7 | 92.4 | 96.8 | 97.2 | 93.3 | 81.5 | 172.8 |
| 400 | 79.9 | 81.8 | 82.1 | 82.7 | 82.3 | 84.5 | 86.0 | 89.4 | 92.6 | 95.7 | 94.7 | 91.4 | 79.0 | 171.9 |
| 500 | 77.8 | 81.0 | 83.4 | 83.3 | 83.1 | 84.1 | 84.8 | 89.0 | 91.4 | 94.2 | 92.9 | 88.6 | 76.0 | 170.8 |
| 630 | 75.7 | 79.1 | 82.1 | 84.0 | 84.0 | 85.1 | 85.8 | 89.0 | 90.6 | 94.3 | 91.9 | 87.1 | 74.5 | 170.9 |
| 800 | 73.9 | 78.3 | 80.8 | 82.7 | 84.0 | 86.2 | 86.8 | 88.4 | 90.1 | 92.9 | 90.0 | 85.4 | 73.3 | 170.4 |
| 1000 | 72.2 | 77.5 | 79.7 | 81.2 | 83.3 | 85.4 | 85.6 | 87.6 | 89.4 | 91.3 | 88.4 | 83.4 | 70.6 | 169.7 |
| 1250 | 70.0 | 75.8 | 79.9 | 81.2 | 83.6 | 85.9 | 84.8 | 87.1 | 87.9 | 90.5 | 86.5 | 81.3 | 69.0 | 169.5 |
| 1600 | 68.2 | 73.7 | 77.9 | 80.3 | 81.9 | 83.7 | 83.2 | 85.5 | 85.6 | 87.6 | 83.7 | 77.9 | 64.2 | 168.5 |
| 2000 | 63.0 | 71.5 | 76.1 | 78.6 | 81.9 | 83.3 | 81.3 | 83.8 | 83.7 | 86.4 | 80.7 | 74.7 | 60.0 | 168.7 |
| 2500 | 55.5 | 67.3 | 71.5 | 75.4 | 79.6 | 81.2 | 78.1 | 80.5 | 80.7 | 81.6 | 76.3 | 68.9 | 52.9 | 167.7 |
| 3150 | 50.8 | 62.1 | 66.9 | 70.2 | 75.4 | 76.3 | 73.2 | 74.0 | 76.0 | 74.8 | 69.0 | 59.9 | 42.6 | 166.3 |
| 4000 | 42.3 | 52.8 | 61.1 | 65.8 | 66.4 | 68.3 | 66.9 | 67.5 | 68.9 | 67.9 | 59.6 | 45.0 | 22.6 | 166.1 |
| 5000 | 27.9 | 40.2 | 49.8 | 54.8 | 60.1 | 61.8 | 57.1 | 57.6 | 58.0 | 56.4 | 45.2 | 27.7 | | 166.1 |
| 6300 | 2.7 | 21.4 | 30.6 | 37.9 | 42.3 | 44.2 | 42.2 | 40.2 | 41.2 | 35.8 | 22.8 | | | 164.5 |
| 8000 | | | 3.5 | 12.5 | 15.3 | 18.6 | 18.6 | 15.1 | 15.6 | 5.5 | | | | 164.3 |
| 10000 | | | | | | | | | | | | | | 166.0 |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| CASPL | 87.5 | 90.4 | 92.5 | 93.5 | 94.5 | 96.4 | 96.7 | 99.6 | 102.7 | 107.2 | 108.3 | 109.3 | 96.9 | 185.0 |
| PNL | 92.6 | 96.4 | 99.1 | 101.1 | 103.3 | 105.0 | 104.2 | 106.7 | 108.7 | 112.0 | 111.4 | 109.5 | 98.5 | |
| PNLT | 93.8 | 96.4 | 99.1 | 101.1 | 104.5 | 106.2 | 104.2 | 106.7 | 108.7 | 113.0 | 111.4 | 109.5 | 99.6 | |

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-29-78 TAPE NO. N313 ALPHA SB59 TAMP 53.60
 LOCATION C41 ANECH CH AERO. RDG. ADH213 PAIRB - 29.5500 RELHUM 39.70

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
 0100A 0121A 731.5 N (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)

07/19/79 15.714

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. AIG

IDENTIFICATION - MODEL FJ-400-AMODL X01220
BACKGROUND FJB400-FMODL X05220

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

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TEST DATE 03-29-78

LOCATION C41 ANECH CH

TAPE NO. N313

AERO. RDG. ADH219

ALPHA SB59

PAMB 29.5600

TAMB 58.46

RELHUM 13.30

ACOUSTIC RANGE

12.2 M (40.0 FT) ARC

139.0 SQ CH (21.55 SQ IN) - MODEL

110.67 M/SEC (390.0 FPS)

MODEL TEST POINT

0100A 0122A

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-AMODL X01220

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

112.2

113.1

113.2

112.7

112.9

113.6

112.9

115.8

120.4

124.9

125.9

127.0

122.2

163.1

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 390.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-29-78 TAPE NO. N313 ALPHA SB59 TAMB 58.48
LOCATION C41 ANECH CH AERG. RDG. ADH219 PAMB 29.5600 RELHUM 13.30

MODEL TEST POINT 0100A 0122A ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 118.87 M/SEC (390.0 FPS) FREE-JET SPEED

07/19/79 15.714

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 2400.0 FT. SL

IDENTIFICATION - FJ-400-AMODL X01225

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 69.2 | 71.5 | 72.2 | 72.2 | 72.4 | 73.7 | 73.4 | 74.6 | 80.5 | 89.9 | 91.7 | 93.6 | 83.5 | 167.1 |
| 63 | 70.9 | 71.9 | 73.3 | 72.1 | 74.1 | 74.6 | 76.4 | 76.4 | 83.0 | 90.9 | 93.5 | 94.5 | 82.8 | 166.3 |
| 80 | 71.4 | 73.4 | 75.1 | 74.4 | 76.3 | 76.3 | 76.4 | 77.9 | 85.0 | 91.8 | 94.3 | 94.0 | 83.2 | 168.6 |
| 100 | 71.3 | 74.5 | 75.9 | 75.0 | 75.8 | 77.4 | 77.1 | 79.5 | 86.9 | 92.5 | 93.8 | 93.1 | 83.7 | 168.5 |
| 125 | 74.7 | 74.4 | 76.4 | 76.5 | 77.2 | 78.8 | 79.3 | 81.2 | 87.4 | 91.4 | 93.4 | 91.2 | 81.6 | 167.6 |
| 160 | 75.9 | 75.9 | 78.2 | 77.6 | 79.4 | 79.9 | 79.8 | 82.4 | 88.1 | 91.9 | 92.4 | 90.2 | 81.1 | 167.4 |
| 200 | 75.5 | 75.6 | 80.2 | 79.6 | 79.6 | 80.9 | 81.1 | 83.4 | 89.2 | 92.5 | 91.6 | 88.3 | 81.1 | 167.5 |
| 250 | 76.1 | 76.8 | 78.8 | 78.7 | 78.7 | 79.8 | 81.0 | 84.0 | 89.6 | 93.6 | 92.3 | 89.6 | 81.7 | 168.6 |
| 315 | 76.9 | 78.0 | 78.5 | 78.3 | 80.1 | 81.1 | 82.0 | 84.5 | 89.2 | 93.3 | 92.1 | 89.8 | 81.4 | 169.1 |
| 400 | 79.8 | 82.9 | 83.3 | 81.2 | 82.9 | 82.8 | 82.7 | 86.0 | 90.3 | 93.1 | 91.9 | 88.0 | 79.9 | 169.4 |
| 500 | 78.8 | 82.2 | 83.9 | 85.1 | 84.3 | 84.0 | 83.1 | 86.4 | 89.8 | 93.2 | 90.1 | 86.0 | 78.0 | 169.4 |
| 630 | 77.5 | 80.2 | 82.4 | 83.7 | 84.0 | 85.2 | 84.5 | 86.6 | 90.1 | 92.4 | 88.3 | 84.6 | 77.0 | 169.1 |
| 800 | 77.9 | 80.3 | 81.7 | 82.1 | 82.3 | 85.1 | 84.1 | 85.9 | 89.1 | 90.7 | 86.4 | 82.3 | 74.8 | 168.4 |
| 1000 | 76.2 | 79.8 | 82.0 | 82.0 | 82.9 | 83.8 | 83.6 | 85.6 | 87.7 | 89.2 | 84.4 | 81.1 | 72.4 | 167.9 |
| 1250 | 76.2 | 80.3 | 81.2 | 81.4 | 83.1 | 84.4 | 82.1 | 85.3 | 85.8 | 86.4 | 82.2 | 78.9 | 70.0 | 167.3 |
| 1600 | 73.8 | 77.9 | 80.0 | 80.7 | 81.3 | 81.9 | 80.7 | 82.9 | 83.9 | 84.8 | 79.1 | 76.2 | 66.8 | 166.7 |
| 2000 | 69.6 | 74.9 | 77.2 | 79.1 | 81.4 | 81.9 | 79.1 | 80.9 | 81.6 | 81.8 | 75.8 | 72.5 | 63.3 | 166.3 |
| 2500 | 68.2 | 73.4 | 76.7 | 78.0 | 79.8 | 79.8 | 76.2 | 77.6 | 78.6 | 76.2 | 70.3 | 68.1 | 58.1 | 165.9 |
| 3150 | 59.8 | 67.9 | 71.3 | 72.9 | 75.1 | 75.5 | 72.2 | 71.5 | 73.6 | 71.8 | 64.8 | 57.3 | 44.0 | 165.1 |
| 4000 | 51.3 | 59.3 | 63.5 | 64.9 | 66.8 | 67.0 | 65.2 | 64.7 | 65.9 | 63.2 | 55.2 | 44.7 | 26.7 | 164.2 |
| 5000 | 36.1 | 44.8 | 52.0 | 56.3 | 60.4 | 60.1 | 55.5 | 54.8 | 55.6 | 49.3 | 39.1 | 25.5 | | 163.8 |
| 6300 | 15.9 | 26.4 | 36.2 | 41.1 | 42.1 | 42.8 | 40.4 | 37.0 | 39.7 | 30.1 | 15.6 | | | 162.8 |
| 8000 | | | 6.8 | 14.8 | 15.3 | 16.6 | 16.4 | 11.4 | 11.6 | 0.1 | | | | 161.2 |
| 10000 | | | | | | | | | | | | | | 159.1 |

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QASPL 88.2 90.9 92.4 92.7 93.5 94.3 93.7 96.1 100.2 103.7 103.4 102.1 92.6 181.1
 PNL 94.5 98.1 100.4 101.2 102.6 103.2 101.4 103.4 106.3 108.8 106.8 103.9 94.9
 PNLT 94.5 98.1 101.2 101.6 104.0 104.3 101.4 103.4 107.0 109.4 106.8 103.9 94.9

DIAMETER RATIO 3.061 FREQUENCY SHIFT -9

TEST DATE 03-29-78 TAPE NO. N313 ALPHA 3859 TAMB 58.46
 LOCATION C41 ANECH CH AERO. R50. ADH219 PAMB 29.5600 RELHUM 13.90

MODEL TEST POINT 0122A ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 118.87 M/SEC (390.0 FPS)
 SIZE

07/19/79 15.714

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-AMODL X01230
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 86.0 | 90.8 | 90.3 | 90.9 | 91.0 | 92.8 | 95.2 | 97.9 | 100.3 | 107.7 | 111.8 | 116.0 | 114.4 | 149.5 |
| 315 | 86.9 | 89.2 | 90.2 | 90.7 | 92.8 | 95.2 | 98.1 | 98.0 | 102.2 | 109.7 | 113.9 | 119.8 | 115.5 | 151.3 |
| 400 | 89.2 | 90.4 | 91.7 | 91.5 | 92.6 | 95.0 | 98.3 | 99.0 | 103.7 | 113.6 | 116.9 | 121.3 | 115.5 | 153.2 |
| 500 | 89.7 | 91.8 | 93.5 | 93.6 | 94.2 | 96.8 | 97.7 | 100.1 | 105.8 | 115.6 | 119.2 | 122.4 | 116.6 | 154.8 |
| 630 | 91.3 | 93.6 | 94.4 | 94.7 | 96.0 | 98.1 | 99.0 | 102.4 | 107.6 | 117.0 | 120.3 | 123.0 | 117.4 | 155.7 |
| 800 | 96.1 | 94.4 | 96.2 | 96.9 | 97.3 | 99.4 | 100.3 | 103.9 | 109.9 | 117.5 | 121.1 | 124.0 | 118.4 | 156.6 |
| 1000 | 100.4 | 100.7 | 100.2 | 99.5 | 98.6 | 101.0 | 101.9 | 105.0 | 110.5 | 117.3 | 120.7 | 123.9 | 118.0 | 156.4 |
| 1250 | 97.5 | 101.1 | 103.1 | 102.9 | 102.0 | 103.1 | 103.2 | 106.9 | 111.1 | 116.7 | 121.5 | 124.5 | 117.4 | 156.9 |
| 1600 | 98.1 | 97.9 | 99.2 | 100.2 | 100.6 | 102.7 | 103.6 | 107.0 | 112.2 | 116.8 | 121.7 | 123.5 | 116.2 | 156.6 |
| 2000 | 98.5 | 100.0 | 100.0 | 99.5 | 99.4 | 101.2 | 103.6 | 107.5 | 112.3 | 117.1 | 120.3 | 120.5 | 112.8 | 155.0 |
| 2500 | 99.1 | 99.5 | 100.7 | 100.4 | 100.8 | 102.1 | 104.3 | 107.4 | 112.2 | 117.7 | 119.2 | 118.4 | 111.2 | 154.3 |
| 3150 | 101.4 | 101.4 | 100.7 | 100.7 | 100.5 | 103.1 | 104.5 | 108.5 | 112.4 | 116.6 | 118.2 | 117.7 | 109.9 | 153.7 |
| 4000 | 100.7 | 101.5 | 102.3 | 100.8 | 100.6 | 102.7 | 104.1 | 108.6 | 111.6 | 116.4 | 116.8 | 116.3 | 107.8 | 152.9 |
| 5000 | 99.4 | 101.3 | 101.8 | 102.5 | 101.8 | 103.4 | 104.3 | 108.5 | 111.3 | 116.7 | 115.8 | 114.7 | 107.5 | 152.7 |
| 6300 | 97.9 | 100.3 | 101.3 | 102.2 | 102.5 | 104.6 | 104.8 | 108.0 | 111.1 | 115.9 | 114.7 | 113.7 | 106.9 | 152.2 |
| 8000 | 97.3 | 101.0 | 100.9 | 101.5 | 102.7 | 104.1 | 104.4 | 107.6 | 110.6 | 114.7 | 113.7 | 113.1 | 106.1 | 151.6 |
| 10000 | 95.1 | 99.2 | 101.5 | 101.6 | 102.4 | 104.6 | 103.7 | 107.0 | 109.6 | 113.6 | 112.3 | 111.5 | 105.6 | 151.3 |
| 12500 | 92.2 | 96.9 | 99.0 | 100.7 | 102.0 | 103.3 | 102.8 | 105.7 | 107.4 | 111.5 | 110.2 | 109.8 | 103.7 | 150.3 |
| 16000 | 86.4 | 95.3 | 97.9 | 99.8 | 101.4 | 103.1 | 101.6 | 104.0 | 105.8 | 110.7 | 108.4 | 108.2 | 102.6 | 150.5 |
| 20000 | 84.3 | 92.4 | 94.2 | 96.3 | 100.2 | 101.8 | 99.0 | 101.4 | 103.2 | 107.0 | 105.6 | 105.5 | 99.7 | 149.4 |
| 25000 | 81.7 | 89.0 | 91.0 | 92.5 | 97.0 | 98.1 | 95.9 | 96.6 | 100.4 | 103.4 | 101.5 | 101.3 | 97.5 | 148.1 |
| 31500 | 80.6 | 84.7 | 88.2 | 90.7 | 91.0 | 92.0 | 91.5 | 92.7 | 97.5 | 100.9 | 97.7 | 95.4 | 90.8 | 147.5 |
| 40000 | 75.3 | 79.2 | 83.4 | 85.2 | 89.2 | 90.4 | 88.3 | 88.2 | 92.6 | 96.5 | 90.6 | 90.6 | 86.7 | 147.3 |
| 50000 | 68.7 | 75.7 | 75.4 | 78.6 | 80.9 | 83.3 | 81.8 | 81.5 | 88.2 | 91.1 | 88.3 | 84.9 | 81.1 | 146.0 |
| 63000 | 62.1 | 71.7 | 69.8 | 73.3 | 72.6 | 75.2 | 76.1 | 75.4 | 83.7 | 85.5 | 82.8 | 79.6 | 76.0 | 145.8 |
| 80000 | 57.0 | 67.0 | 64.1 | 69.6 | 66.5 | 71.1 | 68.9 | 70.7 | 79.0 | 80.8 | 77.5 | 73.6 | 68.6 | 147.7 |
| QASPL | 109.9 | 111.6 | 112.5 | 112.8 | 113.3 | 115.1 | 115.5 | 116.9 | 122.8 | 128.8 | 131.0 | 133.1 | 127.0 | 167.2 |

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| TEST DATE | 03-29-78 | TAPE NO. | N313 | ALPHA | SB59 | TAPM | 51.80 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH212 | PAMB | 29.5500 | RELHUM | 45.00 |

| MODEL | TEST POINT | ACQUSTIC RANGE | 12.2 M (40.0 FT) ARC | 139.0 SQ CH (21.55 SQ IN) - MODEL | 0. | FREE-JET SPEED | M/SEC (0. FPS) |
|-------|------------|----------------|-----------------------|------------------------------------|----|----------------|-----------------|
| 0100A | 0123A | | | | | | |

97/19/79 15.714

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-AM00L X01230

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

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3150000

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6300000

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MODEL/FULL SIZE SCALE FACTOR
INPUT 1.000 CALC. 1.000

FREE JET VELOCITY (FT/SEC)
FREE JET DIAMETER (IN) 0. 48.00

REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

TEST DATE 03-29-78 TAPE NO. N313 ALPHA 3859 TAPB 51.80
LOCATION C41 ANECH CH AERO. RDG. ADH212 PAMB 29.5500 RELHUM 45.00

MODEL TEST POINT 0100A 0123A ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.65 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 35 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-AMODL X01236

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|-------|------|-------|
| 50 | 67.6 | 70.7 | 73.0 | 75.5 | 78.0 | 77.6 | 78.6 | 81.0 | 85.0 | 94.0 | 95.6 | 97.6 | 98.7 | 171.4 |
| 63 | 68.4 | 72.0 | 74.8 | 75.6 | 76.6 | 79.3 | 80.1 | 82.1 | 87.1 | 95.8 | 97.9 | 98.3 | 99.7 | 172.9 |
| 80 | 69.9 | 73.8 | 75.6 | 76.6 | 78.4 | 80.6 | 81.4 | 84.4 | 88.9 | 97.1 | 98.9 | 99.4 | 90.4 | 173.8 |
| 100 | 74.6 | 74.5 | 77.3 | 78.8 | 79.6 | 81.9 | 82.6 | 85.8 | 91.1 | 97.6 | 99.6 | 100.3 | 91.3 | 174.7 |
| 125 | 78.8 | 80.7 | 81.3 | 81.3 | 80.9 | 83.4 | 84.1 | 86.8 | 91.6 | 97.3 | 99.1 | 100.0 | 90.6 | 174.6 |
| 160 | 75.7 | 80.9 | 84.0 | 84.6 | 84.1 | 85.3 | 85.3 | 88.6 | 92.0 | 96.5 | 99.7 | 100.3 | 89.6 | 175.1 |
| 200 | 76.1 | 77.6 | 80.0 | 81.8 | 82.8 | 84.8 | 85.8 | 88.5 | 93.0 | 96.4 | 99.7 | 99.0 | 88.0 | 174.7 |
| 250 | 76.1 | 79.1 | 80.6 | 80.9 | 81.1 | 83.2 | 85.4 | 88.9 | 92.8 | 96.5 | 98.0 | 95.7 | 83.9 | 173.1 |
| 315 | 76.3 | 78.6 | 80.9 | 81.5 | 82.3 | 83.6 | 85.6 | 88.5 | 92.4 | 96.8 | 96.4 | 93.0 | 81.5 | 172.4 |
| 400 | 78.1 | 80.6 | 81.4 | 81.7 | 84.6 | 85.7 | 85.7 | 89.2 | 92.3 | 95.4 | 95.0 | 91.6 | 79.2 | 171.8 |
| 500 | 77.0 | 79.8 | 81.9 | 81.2 | 81.6 | 83.8 | 85.1 | 89.0 | 91.1 | 94.7 | 93.1 | 89.6 | 76.1 | 171.1 |
| 630 | 75.2 | 79.1 | 81.0 | 82.7 | 82.5 | 84.3 | 85.0 | 88.7 | 90.5 | 94.5 | 91.6 | 87.3 | 74.7 | 170.8 |
| 800 | 73.1 | 77.7 | 80.2 | 82.1 | 82.9 | 85.4 | 85.2 | 87.9 | 90.0 | 93.4 | 90.0 | 85.6 | 73.0 | 170.3 |
| 1000 | 72.1 | 78.2 | 79.6 | 81.2 | 83.0 | 84.6 | 84.7 | 87.3 | 89.3 | 91.9 | 88.5 | 84.5 | 71.1 | 169.9 |
| 1250 | 69.4 | 76.0 | 80.0 | 81.4 | 82.5 | 85.1 | 83.6 | 86.6 | 88.1 | 90.4 | 86.7 | 82.0 | 69.2 | 169.5 |
| 1600 | 65.7 | 73.1 | 77.1 | 79.9 | 81.8 | 83.4 | 82.7 | 84.9 | 85.5 | 87.7 | 83.6 | 78.9 | 64.9 | 168.5 |
| 2000 | 61.9 | 71.0 | 75.6 | 78.8 | 81.1 | 83.0 | 81.3 | 83.0 | 83.4 | 86.3 | 80.9 | 76.6 | 60.7 | 168.6 |
| 2500 | 55.0 | 66.8 | 71.0 | 74.6 | 79.3 | 81.2 | 78.1 | 79.7 | 80.0 | 81.4 | 76.3 | 70.1 | 52.9 | 167.5 |
| 3150 | 49.1 | 61.0 | 65.9 | 69.3 | 74.7 | 76.1 | 73.7 | 73.3 | 75.3 | 75.3 | 68.9 | 60.9 | 42.4 | 166.2 |
| 4000 | 41.7 | 52.0 | 59.2 | 64.1 | 65.8 | 67.2 | 68.2 | 66.1 | 68.5 | 68.1 | 58.8 | 48.1 | 21.2 | 165.6 |
| 5000 | 28.6 | 38.9 | 48.2 | 53.2 | 59.0 | 60.7 | 56.0 | 56.3 | 57.5 | 55.1 | 44.9 | 27.6 | | 165.4 |
| 6300 | 2.2 | 21.2 | 28.1 | 35.9 | 40.5 | 43.7 | 41.5 | 38.7 | 40.9 | 36.6 | 21.6 | | | 164.2 |
| 8000 | | | 1.3 | 11.3 | 14.2 | 17.9 | 17.6 | 13.4 | 15.2 | 6.1 | | | | 164.0 |
| 10000 | | | | | | | | | | | | | | 165.8 |

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QASPL 86.9 90.1 92.2 93.3 94.1 96.1 96.5 99.5 102.8 107.5 108.7 108.5 98.7 185.1
 PNL 91.6 95.6 98.6 100.8 102.8 104.7 103.9 106.2 106.5 112.1 111.7 109.9 98.5
 PNL 92.7 96.1 99.6 101.3 104.1 105.9 104.4 106.2 106.0 112.7 112.7 109.9 99.7

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-29-78 TAPE NO. N313 ALPHA SB59 TAMB 51.80
 LOCATION C41 ANECH CH AERO. RDG. ADH212 PAMB 29.5500 RELHUM 45.00

MODEL TEST POINT ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)
 0100A 0123A

07/19/79 15.714

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-AMODL X01240
BACKGROUND FJB400-FMODL X05220

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PHL

FREQ

90

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

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TEST DATE 03-29-78 TAPE NO. N313 ALPHA 3859 TAMB 58.46
LOCATION C41 ANECH CH AERO. RDG. ADH221 PAMB 29.5600 RELHUM 13.30

MODEL TEST POINT 0100A 0124A ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 116.87 M/SEC (390.0 FPS) FREE-JET SPEED

07/19/79 15.714

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-AMODL X01240

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 88.8 | 91.5 | 90.2 | 89.8 | 88.8 | 88.5 | 89.0 | 91.1 | 94.8 | 101.7 | 105.1 | 112.2 | 108.9 | 143.7 |
| 315 | 88.8 | 91.5 | 90.2 | 89.8 | 90.2 | 91.1 | 90.2 | 91.6 | 97.0 | 106.6 | 109.6 | 115.0 | 109.9 | 146.7 |
| 400 | 90.8 | 91.3 | 91.2 | 90.2 | 90.7 | 91.4 | 91.2 | 92.6 | 99.7 | 110.1 | 113.3 | 116.9 | 109.8 | 149.0 |
| 500 | 92.7 | 92.0 | 92.5 | 90.4 | 92.0 | 92.6 | 92.9 | 94.3 | 102.0 | 111.5 | 115.4 | 117.9 | 109.1 | 150.4 |
| 630 | 93.3 | 93.2 | 94.6 | 92.9 | 94.2 | 94.3 | 93.9 | 96.2 | 104.5 | 112.9 | 116.7 | 117.9 | 109.8 | 151.2 |
| 800 | 92.8 | 95.1 | 95.3 | 93.6 | 94.5 | 95.4 | 95.5 | 98.0 | 106.1 | 113.0 | 117.4 | 117.9 | 111.3 | 151.6 |
| 1000 | 96.3 | 94.7 | 95.9 | 95.4 | 96.2 | 96.6 | 96.7 | 99.5 | 106.8 | 112.4 | 117.5 | 116.8 | 110.5 | 151.2 |
| 1250 | 98.4 | 96.7 | 97.6 | 96.2 | 98.2 | 98.7 | 98.0 | 100.9 | 107.9 | 113.1 | 117.2 | 116.4 | 111.2 | 151.3 |
| 1600 | 98.1 | 100.2 | 100.5 | 98.6 | 98.3 | 99.6 | 99.6 | 102.1 | 109.3 | 113.9 | 116.3 | 115.6 | 110.7 | 151.2 |
| 2000 | 98.7 | 97.7 | 98.2 | 98.9 | 97.6 | 98.7 | 99.2 | 102.9 | 109.1 | 114.9 | 116.7 | 115.8 | 112.2 | 151.7 |
| 2500 | 100.0 | 98.8 | 99.2 | 97.9 | 98.7 | 99.9 | 101.0 | 103.8 | 111.1 | 115.4 | 116.5 | 116.9 | 113.0 | 152.3 |
| 3150 | 101.1 | 101.2 | 100.6 | 98.8 | 99.9 | 100.9 | 101.3 | 104.9 | 110.7 | 115.2 | 115.2 | 114.3 | 111.4 | 151.4 |
| 4000 | 101.8 | 102.4 | 102.4 | 101.5 | 101.6 | 101.9 | 102.2 | 105.5 | 111.0 | 115.2 | 114.2 | 113.0 | 110.3 | 151.3 |
| 5000 | 101.5 | 101.6 | 102.9 | 102.3 | 102.3 | 103.4 | 102.8 | 105.9 | 110.4 | 114.4 | 112.6 | 111.8 | 109.8 | 150.7 |
| 6300 | 101.9 | 101.8 | 102.3 | 102.5 | 102.1 | 104.2 | 103.5 | 106.3 | 110.3 | 112.8 | 111.5 | 110.9 | 108.7 | 150.2 |
| 8000 | 102.3 | 101.6 | 102.3 | 101.5 | 102.2 | 103.3 | 103.1 | 105.2 | 109.0 | 112.1 | 109.9 | 109.9 | 107.8 | 149.7 |
| 10000 | 103.1 | 102.9 | 102.2 | 101.8 | 102.7 | 103.6 | 102.3 | 105.0 | 106.9 | 110.0 | 107.6 | 107.6 | 106.6 | 148.9 |
| 12500 | 101.1 | 101.9 | 103.2 | 101.8 | 103.3 | 101.9 | 100.9 | 103.2 | 105.6 | 108.9 | 105.7 | 107.3 | 106.2 | 148.8 |
| 16000 | 99.9 | 100.2 | 101.2 | 101.5 | 102.8 | 102.0 | 99.6 | 101.5 | 104.6 | 106.2 | 103.8 | 105.5 | 105.8 | 148.7 |
| 20000 | 97.3 | 98.0 | 99.2 | 99.4 | 100.9 | 100.5 | 97.4 | 99.7 | 103.1 | 101.7 | 98.9 | 100.9 | 103.1 | 147.9 |
| 25000 | 91.7 | 94.7 | 95.1 | 95.9 | 97.8 | 97.2 | 94.5 | 95.1 | 99.1 | 100.3 | 97.6 | 97.6 | 99.6 | 147.0 |
| 31500 | 89.2 | 90.8 | 91.4 | 91.2 | 92.3 | 91.8 | 90.4 | 90.7 | 95.8 | 95.7 | 94.1 | 93.3 | 95.4 | 145.9 |
| 40000 | 86.9 | 85.8 | 88.1 | 89.4 | 90.4 | 89.5 | 85.8 | 87.0 | 91.2 | 89.6 | 87.8 | 88.8 | 90.9 | 145.9 |
| 50000 | 81.6 | 79.9 | 82.4 | 83.6 | 82.2 | 81.9 | 80.5 | 79.7 | 86.9 | 84.1 | 82.7 | 83.4 | 85.7 | 144.4 |
| 63000 | 73.8 | 73.9 | 74.4 | 76.5 | 73.7 | 73.6 | 74.5 | 73.2 | 80.5 | 79.6 | 77.4 | 75.1 | 78.7 | 143.1 |
| 80000 | 63.8 | 64.5 | 64.7 | 67.3 | 66.7 | 67.3 | 66.2 | 66.3 | 70.7 | 69.8 | 67.6 | 65.3 | 68.9 | 140.9 |
| GASPL | 112.3 | 112.4 | 112.9 | 112.2 | 112.9 | 113.4 | 112.8 | 115.6 | 120.8 | 125.5 | 127.2 | 127.8 | 122.9 | 163.7 |

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| | | | |
|------------------------------|----------------------------|--------|-----------------------------|
| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 390.00 | REFRACTION CORRECTION - YES |
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| | | | |
|-----------------------|-------------------|--------------|--------------|
| TEST DATE 03-29-78 | TAPE NO. N313 | TALPHA SB59 | TAMB 58.86 |
| LOCATION C41 ANECH CH | AERO. RDS. ADH221 | PAMB 29.5600 | RELHUM 13.30 |

| | | | |
|------------------|-----------------------|------------------------------------|---------------------------|
| MODEL TEST POINT | ACOUSTIC RANGE | 139.0 SQ CM (21.55 SQ IN) - MODEL | 110.87 M/SEC (390.0 FPS) |
| 0100A 0124A | 12.2 M (40.0 FT) ARC | SIZE | FREE-JET SPEED |

07/19/79 15.714

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-A-MODL X01245

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 69.5 | 71.3 | 72.5 | 72.2 | 73.1 | 74.0 | 73.7 | 74.6 | 81.0 | 90.3 | 92.0 | 93.4 | 82.9 | 167.2 |
| 63 | 71.4 | 72.2 | 73.8 | 72.4 | 74.4 | 75.1 | 75.3 | 76.3 | 83.3 | 91.7 | 94.1 | 94.3 | 82.2 | 168.5 |
| 80 | 71.9 | 73.4 | 75.9 | 74.9 | 76.5 | 76.8 | 76.5 | 76.5 | 85.8 | 93.0 | 95.3 | 94.3 | 82.8 | 169.3 |
| 100 | 71.3 | 75.2 | 76.4 | 75.5 | 76.8 | 77.9 | 77.8 | 79.9 | 87.3 | 93.1 | 95.9 | 94.2 | 84.1 | 169.7 |
| 125 | 74.7 | 74.7 | 76.9 | 77.3 | 78.4 | 79.0 | 79.0 | 81.3 | 87.8 | 92.4 | 95.9 | 92.9 | 83.1 | 169.4 |
| 160 | 76.6 | 76.6 | 78.5 | 77.9 | 80.4 | 80.9 | 80.1 | 82.6 | 88.9 | 92.9 | 95.5 | 92.2 | 83.4 | 169.5 |
| 200 | 76.0 | 79.9 | 81.2 | 80.1 | 80.3 | 81.7 | 81.6 | 83.6 | 90.0 | 93.6 | 94.3 | 91.2 | 82.5 | 169.3 |
| 250 | 76.3 | 77.1 | 78.8 | 80.2 | 79.4 | 80.6 | 81.0 | 84.3 | 89.7 | 94.2 | 94.4 | 91.0 | 83.3 | 169.8 |
| 315 | 77.3 | 77.6 | 79.4 | 78.9 | 80.2 | 81.6 | 82.5 | 84.8 | 91.3 | 94.4 | 93.8 | 91.5 | 83.3 | 170.4 |
| 400 | 77.9 | 79.8 | 80.5 | 79.5 | 81.1 | 82.3 | 82.5 | 85.6 | 90.6 | 93.9 | 91.9 | 88.3 | 80.7 | 169.6 |
| 500 | 78.1 | 80.6 | 82.0 | 81.9 | 82.6 | 83.0 | 83.1 | 85.9 | 90.6 | 93.4 | 90.4 | 86.3 | 78.6 | 169.4 |
| 630 | 77.3 | 79.4 | 82.1 | 82.4 | 83.0 | 84.2 | 83.5 | 86.1 | 89.8 | 92.2 | 86.3 | 84.4 | 77.0 | 168.8 |
| 800 | 77.1 | 79.3 | 81.2 | 82.4 | 82.5 | 84.8 | 83.9 | 86.2 | 89.2 | 90.3 | 86.8 | 82.7 | 74.8 | 168.3 |
| 1000 | 77.2 | 78.8 | 81.0 | 81.2 | 82.4 | 83.8 | 83.4 | 84.9 | 87.7 | 89.3 | 84.7 | 81.1 | 72.8 | 167.8 |
| 1250 | 77.5 | 79.8 | 80.7 | 81.4 | 82.8 | 83.9 | 82.4 | 84.5 | 85.3 | 86.8 | 81.9 | 78.0 | 70.2 | 167.1 |
| 1600 | 74.5 | 78.1 | 81.2 | 81.0 | 83.1 | 81.9 | 80.7 | 82.4 | 83.7 | 85.1 | 79.2 | 78.3 | 67.4 | 166.9 |
| 2000 | 72.3 | 75.9 | 80.4 | 82.4 | 82.4 | 81.9 | 79.3 | 80.4 | 82.3 | 81.8 | 76.3 | 72.9 | 64.0 | 166.9 |
| 2500 | 68.0 | 72.4 | 75.9 | 77.7 | 80.1 | 79.9 | 78.6 | 78.0 | 79.9 | 76.1 | 69.6 | 65.6 | 56.4 | 166.0 |
| 3150 | 59.0 | 66.6 | 70.0 | 72.6 | 75.6 | 75.2 | 72.2 | 71.6 | 74.0 | 72.3 | 65.0 | 57.2 | 44.4 | 165.1 |
| 4000 | 50.3 | 58.0 | 62.5 | 64.6 | 67.1 | 67.0 | 65.1 | 64.2 | 66.9 | 63.0 | 55.2 | 44.0 | 26.8 | 164.1 |
| 5000 | 38.3 | 45.5 | 52.9 | 57.4 | 60.1 | 59.8 | 55.5 | 55.1 | 56.0 | 49.3 | 39.1 | 25.6 | | 164.1 |
| 6300 | 15.1 | 25.4 | 35.2 | 40.8 | 41.9 | 42.3 | 40.2 | 37.0 | 39.6 | 29.5 | 16.3 | | | 162.6 |
| 8000 | | 5.8 | 14.5 | 15.3 | 16.3 | 16.1 | 11.2 | 12.0 | 0.2 | | | | | 161.2 |
| 10000 | | | | | | | | | | | | | | 159.0 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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| | | | | | | | | | | | | | | |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| QASPL | 86.2 | 90.2 | 92.1 | 92.3 | 93.4 | 94.2 | 93.6 | 95.9 | 100.6 | 104.3 | 104.9 | 102.9 | 93.3 | 181.7 |
| PWL | 94.6 | 97.9 | 100.5 | 101.3 | 103.0 | 103.1 | 101.5 | 103.2 | 106.7 | 109.3 | 107.8 | 105.0 | 96.0 | |
| PWL | 96.0 | 98.4 | 101.1 | 102.3 | 104.2 | 104.3 | 101.5 | 103.2 | 107.3 | 109.8 | 107.8 | 105.0 | 96.0 | |

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-29-78 TAPE NO. N313 ALPHA 5859 TAMB 58.48
 LOCATION C41 ANECH CH AERO. RD3. ADH221 PAMB 29.5600 RELHUM 13.30

MODEL TEST POINT 0100A 0124A ACUSTIC RANGE 731.5 M (2400.0 FT) SL '9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 118.67 M/SEC (390.0 FPS) FREE-JET SPEED

07/19/79 15.714

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-AMODL X01250
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50
63
80
100
125
160
200

250 85.5 90.6 90.1 91.1 90.7 92.6 95.2 98.1 100.6 107.9 111.8 117.7 114.4 149.4
315 87.4 89.7 90.2 91.5 93.3 95.4 95.6 98.5 102.2 109.8 113.9 119.8 115.0 151.2
400 88.9 90.4 91.7 91.8 93.3 95.2 96.3 98.5 104.2 114.3 116.9 121.1 115.5 153.2
500 90.2 92.0 93.3 93.6 94.4 96.8 97.7 100.1 106.3 116.9 119.0 121.9 115.8 154.7
630 91.3 93.4 94.9 94.7 96.3 97.9 99.3 102.7 108.9 118.5 120.8 123.0 117.2 156.1
800 95.9 94.4 95.2 97.2 97.3 99.4 101.0 104.2 110.9 120.5 121.9 123.3 117.2 157.1
1000 100.7 101.0 101.2 99.8 99.4 101.0 102.4 105.8 111.7 120.6 121.9 123.4 117.0 157.3
1250 97.5 102.6 103.8 103.4 103.0 104.1 104.5 107.4 112.1 120.6 123.3 123.2 115.9 157.7
1600 98.6 98.9 100.4 101.0 101.3 102.9 104.6 108.2 112.9 120.5 122.7 122.0 114.2 157.2
2000 100.5 101.2 101.0 100.4 101.7 104.1 108.0 113.5 120.6 120.8 116.8 111.5 155.9
2500 100.1 101.3 102.4 101.6 101.5 103.3 105.0 108.6 112.6 120.9 119.9 117.6 109.9 155.6
3150 101.3 101.4 102.1 101.7 103.3 105.0 109.4 113.4 119.7 118.1 116.1 108.1 154.6
4000 99.6 101.1 102.4 101.7 101.8 103.4 104.5 109.4 112.7 116.5 116.5 114.4 107.2 153.5
5000 98.5 100.1 101.1 102.3 102.7 103.8 105.2 109.1 112.6 118.2 115.6 113.8 106.0 153.3
6300 97.6 99.9 101.0 101.2 102.5 104.6 105.0 108.2 111.1 116.8 114.4 112.7 105.6 152.3
8000 97.0 100.6 100.7 100.8 101.9 103.5 104.3 107.9 110.7 116.5 113.3 111.0 104.8 151.7
10000 94.9 99.2 101.0 100.9 101.7 103.8 103.6 107.6 109.3 115.0 111.8 110.4 103.8 151.5
12500 92.0 96.6 99.0 100.0 101.5 102.1 102.4 105.5 107.4 113.2 109.7 107.9 101.5 150.4
16000 90.1 95.5 97.6 99.0 101.6 102.3 100.5 104.2 105.9 111.8 107.9 106.9 100.3 150.5
20000 84.9 92.5 94.1 96.4 99.8 100.9 98.6 101.8 103.8 109.6 105.5 104.1 98.3 150.0
25000 83.8 89.9 92.2 93.4 97.3 98.6 96.5 97.4 102.3 106.2 102.7 101.1 97.3 149.6
31500 82.6 87.0 91.0 92.8 93.1 94.3 94.0 95.1 100.3 105.7 98.4 96.2 92.3 150.8
40000 78.7 83.2 86.8 88.9 92.0 93.1 89.3 91.9 97.1 102.4 97.2 92.3 88.6 151.7
50000 73.1 80.9 80.5 84.2 85.7 87.4 85.4 86.1 93.4 98.2 93.1 88.4 84.2 151.7
63000 68.5 78.8 76.2 79.7 78.3 81.1 80.7 81.1 90.4 93.6 88.2 83.4 79.8 152.6
80000 63.8 76.1 71.8 76.1 73.2 77.2 74.2 77.4 87.1 88.8 83.9 78.4 73.7 155.1

OASPL 110.0 111.9 112.8 112.9 113.6 115.1 115.9 119.5 123.6 131.0 131.6 132.4 126.1 168.2

TEST DATE 03-29-78 TAPE NO. N313 ALPHA SB59 TAMB 63.86
LOCATION C41 ANECH CH AERO. RDG. ADH211 PAMB 29.5500 RELHUM 49.00

MODEL TEST POINT 0100A 0125A ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (O. FPS)

ORIGINAL PAGE IS
OF POOR QUALITY

07/19/79 15.714

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-AMDEL X01250

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PHL

FREQ

50

63

80

100

125

160

200

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

110.0

111.9

112.9

113.6

115.1

115.9

119.5

123.6

131.0

131.6

132.4

126.1

168.2

MODEL/FULL SIZE SCALE FACTOR

INPUT 1.000 CALC. 1.000

FREE JET VELOCITY (FT/SEC)

FREE JET DIAMETER (IN)

0.

46.00

REFRACTION CORRECTION - YES

TURBULANCE CORRECTION - YES

TEST DATE 03-29-78

LOCATION C41 ANECH CH

TAPE NO. N313

AERO. RDG. ADH211

ALPHA 3559

PAMB 29.5500

TAMB 63.88

RELHUM 49.00

MODEL TEST POINT

0100A 0125A

ACUSTIC RANGE

12.2 M (40.0 FT) ARC

139.0 SQ CM (21.55 SQ IN) - MODEL

0. M/SEC (3. FPS)

FREE-JET SPEED

197

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07/19/79 15.714

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-AMODL X01255

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PHL |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|------|-------|-------|
| 50 | 67.6 | 70.7 | 73.0 | 73.8 | 75.8 | 77.8 | 78.8 | 80.5 | 85.5 | 94.5 | 95.6 | 97.6 | 88.7 | 171.3 |
| 63 | 68.9 | 72.2 | 74.6 | 75.6 | 76.6 | 79.3 | 80.1 | 82.1 | 87.6 | 97.1 | 97.6 | 98.4 | 88.9 | 172.8 |
| 80 | 69.9 | 73.5 | 76.1 | 76.6 | 78.6 | 80.4 | 81.6 | 84.6 | 90.1 | 98.6 | 99.4 | 99.4 | 90.2 | 174.3 |
| 100 | 74.4 | 74.5 | 77.3 | 79.1 | 79.6 | 81.9 | 83.4 | 86.1 | 92.1 | 100.6 | 100.4 | 99.6 | 90.0 | 175.2 |
| 125 | 79.1 | 81.0 | 82.3 | 81.6 | 81.6 | 83.4 | 84.6 | 87.6 | 92.8 | 100.6 | 100.4 | 99.5 | 89.6 | 175.4 |
| 160 | 75.7 | 82.4 | 84.8 | 85.1 | 85.1 | 86.3 | 86.6 | 89.1 | 93.0 | 100.5 | 101.5 | 99.1 | 88.1 | 175.9 |
| 200 | 76.5 | 78.5 | 81.2 | 82.5 | 83.3 | 85.0 | 86.5 | 89.8 | 93.7 | 100.1 | 100.7 | 97.5 | 86.0 | 175.3 |
| 250 | 78.1 | 80.6 | 81.5 | 81.3 | 82.1 | 83.6 | 85.9 | 89.3 | 94.0 | 100.2 | 98.4 | 93.9 | 82.6 | 174.1 |
| 315 | 77.3 | 80.3 | 82.6 | 82.7 | 83.0 | 85.0 | 86.5 | 89.7 | 92.8 | 100.0 | 97.1 | 92.2 | 80.2 | 173.7 |
| 400 | 78.0 | 80.4 | 81.2 | 82.9 | 82.9 | 84.7 | 86.2 | 90.1 | 93.2 | 98.9 | 94.9 | 90.0 | 77.4 | 172.7 |
| 500 | 75.9 | 79.4 | 82.0 | 82.1 | 82.7 | 84.5 | 85.4 | 89.9 | 92.2 | 96.7 | 92.7 | 87.7 | 75.5 | 171.6 |
| 630 | 74.3 | 77.9 | 80.3 | 82.5 | 83.3 | 84.6 | 85.8 | 89.2 | 91.8 | 96.0 | 91.4 | 86.4 | 73.3 | 171.4 |
| 800 | 72.9 | 77.4 | 79.9 | 81.1 | 82.9 | 85.2 | 85.4 | 88.1 | 90.0 | 94.3 | 89.7 | 84.6 | 71.8 | 170.5 |
| 1000 | 71.8 | 77.8 | 79.4 | 80.5 | 82.1 | 84.0 | 84.6 | 87.6 | 89.4 | 92.7 | 88.1 | 82.2 | 69.5 | 168.6 |
| 1250 | 69.3 | 76.0 | 79.5 | 80.4 | 81.8 | 84.1 | 83.6 | 87.1 | 87.8 | 91.8 | 86.2 | 80.8 | 67.0 | 169.8 |
| 1600 | 65.5 | 72.6 | 77.0 | 79.2 | 81.3 | 82.2 | 82.2 | 84.7 | 85.4 | 89.4 | 83.1 | 76.9 | 62.7 | 168.6 |
| 2000 | 62.6 | 71.1 | 75.2 | 77.9 | 81.3 | 82.2 | 80.2 | 83.6 | 87.5 | 80.3 | 74.3 | 58.5 | 168.7 | |
| 2500 | 55.6 | 66.9 | 70.2 | 74.7 | 78.9 | 80.3 | 77.7 | 80.1 | 80.6 | 84.0 | 76.2 | 51.5 | 168.2 | |
| 3150 | 51.1 | 61.9 | 67.1 | 70.1 | 75.0 | 76.7 | 74.2 | 74.2 | 77.2 | 78.1 | 70.0 | 60.7 | 42.1 | 167.7 |
| 4000 | 43.7 | 54.3 | 62.1 | 66.3 | 67.9 | 69.5 | 68.8 | 68.6 | 71.4 | 72.9 | 60.5 | 46.9 | 22.6 | 168.9 |
| 5000 | 30.0 | 42.9 | 51.7 | 56.9 | 61.8 | 63.4 | 59.1 | 60.0 | 61.9 | 62.0 | 48.5 | 29.3 | | 169.8 |
| 6300 | 5.6 | 26.4 | 33.6 | 41.5 | 45.4 | 47.8 | 45.1 | 43.3 | 46.1 | 43.6 | 26.6 | 1.3 | | 169.8 |
| 8000 | | 7.6 | 17.7 | 19.9 | 23.7 | 22.3 | 19.1 | 21.6 | 14.2 | | | | | 170.7 |
| 10000 | | | | | | | | | | | | | | 173.3 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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CASPL 87.1 90.5 92.7 93.5 94.4 96.1 98.9 100.1 103.6 110.1 109.4 107.8 97.7 186.2
 PNL 91.7 96.0 98.8 100.8 103.0 104.5 103.9 106.7 109.4 114.8 112.2 108.7 97.2
 PNL 92.8 96.6 99.3 101.3 104.2 105.5 103.9 106.7 109.4 115.4 113.3 109.8 98.3

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-29-78 TAPE NO. N313 ALPHA SB59 TAMB 63.86
 LOCATION C41 ANECH CH AERG. RDG. ADH211 PAMB 29.5500 RELHUM 49.00

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
 0100 A 0125A 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)

07/19/79 15.714

UNTRANSFORMED MODEL SOUND PRESSURE LEVEL CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STL DAY, 38 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-AMODL X01260
BACKGROUND FJB400-FMODL X05220

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

10000000

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OF POOR QUALITY

TEST DATE 03-29-78 TAPE NO. N313 ALPHA 3859 TAMB 58.46
LOCATION C41 ANECH CH AERO. RDG. ADH222 PAMB 29.5600 RELHUM 13.30

MODEL TEST POINT 0100A 0126A ACQUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 118.67 M/SEC (390.0 FPS) FREE-JET SPEED

07/19/79 15.714

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 40.0 FT. ARC

IDENTIFICATION - FJ-400-AMODL X01260

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PML

| | | | | | | | | | | | | | | |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | 59.0 | 60.0 | 61.1 | 60.1 | 66.4 | 66.5 | 66.5 | 90.6 | 94.5 | 102.0 | 105.6 | 112.0 | 106.9 | 143.7 |
| 60 | 59.0 | 60.9 | 91.1 | 90.1 | 90.2 | 91.1 | 90.2 | 91.2 | 97.4 | 107.2 | 110.3 | 116.3 | 109.9 | 147.0 |
| 70 | 90.6 | 91.3 | 91.2 | 90.2 | 90.4 | 91.7 | 90.2 | 91.6 | 97.6 | 110.7 | 113.9 | 117.1 | 110.0 | 149.4 |
| 80 | 92.8 | 92.3 | 92.1 | 90.6 | 91.7 | 92.6 | 92.6 | 94.5 | 103.1 | 112.8 | 116.0 | 116.0 | 109.3 | 150.9 |
| 90 | 93.4 | 93.5 | 94.5 | 92.6 | 94.2 | 94.0 | 94.1 | 96.9 | 104.9 | 114.5 | 117.8 | 118.3 | 110.7 | 152.1 |
| 100 | 94.7 | 95.1 | 95.6 | 94.1 | 94.6 | 95.9 | 95.7 | 99.2 | 107.0 | 115.7 | 119.2 | 118.6 | 113.7 | 153.3 |
| 110 | 97.6 | 95.4 | 96.6 | 96.2 | 96.9 | 97.6 | 97.2 | 100.2 | 107.9 | 115.5 | 120.6 | 118.9 | 113.3 | 154.0 |
| 120 | 99.3 | 97.8 | 98.6 | 97.4 | 99.7 | 99.7 | 99.4 | 102.1 | 109.2 | 116.3 | 121.7 | 119.8 | 115.1 | 155.0 |
| 130 | 99.8 | 102.1 | 102.3 | 100.5 | 99.6 | 101.1 | 100.9 | 103.1 | 109.8 | 117.0 | 120.2 | 119.0 | 114.6 | 154.4 |
| 140 | 102.2 | 100.2 | 100.7 | 100.1 | 98.1 | 99.2 | 100.5 | 104.2 | 109.9 | 117.9 | 120.0 | 119.1 | 114.7 | 154.6 |
| 150 | 103.4 | 102.0 | 100.8 | 98.6 | 100.4 | 100.9 | 101.3 | 105.0 | 111.7 | 117.5 | 118.6 | 118.2 | 114.1 | 154.0 |
| 160 | 101.9 | 103.4 | 103.9 | 102.7 | 102.8 | 102.4 | 102.5 | 106.1 | 111.2 | 116.7 | 116.8 | 116.0 | 112.1 | 152.9 |
| 170 | 103.1 | 102.8 | 103.0 | 103.3 | 101.6 | 102.6 | 103.0 | 106.5 | 111.2 | 116.5 | 116.0 | 113.4 | 110.1 | 152.3 |
| 180 | 102.2 | 101.6 | 102.9 | 101.8 | 102.1 | 103.7 | 103.8 | 107.1 | 110.6 | 116.5 | 114.4 | 112.3 | 109.9 | 151.6 |
| 190 | 102.4 | 101.8 | 102.3 | 102.0 | 101.4 | 104.0 | 103.2 | 106.5 | 116.5 | 114.3 | 113.1 | 111.2 | 109.5 | 151.0 |
| 200 | 101.8 | 102.1 | 102.3 | 101.8 | 101.9 | 102.6 | 102.4 | 105.6 | 109.3 | 113.1 | 111.0 | 111.4 | 108.4 | 150.3 |
| 210 | 102.1 | 102.4 | 102.0 | 101.6 | 102.2 | 102.8 | 101.8 | 105.3 | 106.9 | 110.6 | 108.9 | 109.7 | 107.2 | 149.2 |
| 220 | 100.3 | 100.9 | 102.2 | 101.3 | 101.3 | 101.1 | 100.2 | 103.2 | 105.1 | 109.6 | 107.1 | 107.6 | 106.6 | 148.8 |
| 230 | 96.7 | 96.3 | 99.1 | 99.9 | 101.3 | 101.2 | 98.5 | 101.4 | 103.8 | 106.7 | 104.6 | 105.8 | 105.7 | 148.2 |
| 240 | 97.3 | 98.5 | 98.9 | 98.9 | 99.7 | 99.5 | 96.3 | 99.0 | 102.0 | 103.1 | 101.9 | 103.0 | 104.1 | 147.9 |
| 250 | 91.4 | 94.9 | 94.9 | 95.1 | 96.8 | 96.4 | 93.9 | 94.8 | 99.8 | 100.3 | 98.8 | 97.8 | 99.5 | 146.8 |
| 260 | 89.5 | 91.3 | 91.7 | 90.9 | 91.0 | 91.1 | 90.2 | 90.2 | 95.1 | 96.7 | 94.4 | 93.9 | 96.6 | 145.9 |
| 270 | 84.2 | 83.6 | 86.7 | 87.8 | 90.1 | 89.0 | 85.7 | 85.7 | 90.6 | 90.8 | 88.6 | 88.9 | 91.3 | 145.5 |
| 280 | 80.0 | 82.1 | 82.9 | 83.1 | 82.2 | 82.1 | 80.4 | 80.0 | 86.5 | 84.9 | 82.9 | 83.7 | 85.8 | 144.5 |
| 290 | 74.3 | 73.9 | 74.6 | 76.5 | 72.7 | 73.6 | 74.5 | 73.4 | 80.0 | 79.8 | 78.1 | 75.0 | 78.3 | 143.1 |
| 300 | 64.0 | 64.7 | 65.0 | 66.8 | 66.5 | 67.1 | 65.5 | 66.3 | 70.2 | 70.0 | 68.3 | 65.2 | 68.5 | 140.8 |
| 310 | 113.0 | 113.0 | 113.4 | 112.7 | 112.8 | 113.5 | 113.1 | 116.3 | 121.2 | 127.4 | 129.7 | 129.2 | 124.4 | 165.1 |

07/19/79 15.714

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-AW00L X01265

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|-------|------|------|-------|
| 50 | 69.5 | 71.5 | 72.5 | 72.2 | 72.9 | 74.2 | 73.4 | 74.6 | 81.1 | 91.0 | 92.6 | 93.6 | 83.1 | 167.6 |
| 63 | 71.4 | 72.5 | 73.4 | 72.5 | 74.1 | 75.1 | 75.2 | 76.5 | 84.4 | 93.0 | 94.6 | 94.4 | 82.4 | 169.0 |
| 80 | 72.0 | 73.6 | 75.7 | 74.5 | 76.5 | 76.5 | 76.5 | 78.8 | 86.1 | 94.6 | 96.4 | 94.6 | 83.7 | 170.2 |
| 100 | 73.2 | 75.2 | 77.0 | 76.0 | 77.1 | 78.4 | 78.0 | 81.1 | 88.2 | 95.8 | 97.8 | 95.1 | 86.5 | 171.4 |
| 125 | 75.2 | 76.4 | 77.7 | 76.0 | 79.1 | 80.0 | 79.4 | 82.0 | 89.0 | 95.5 | 99.2 | 95.0 | 85.9 | 172.2 |
| 150 | 77.6 | 77.6 | 79.6 | 79.1 | 81.8 | 81.9 | 81.6 | 83.8 | 90.1 | 96.2 | 100.0 | 95.7 | 87.4 | 173.2 |
| 200 | 77.8 | 81.7 | 83.1 | 82.1 | 81.6 | 83.2 | 82.8 | 84.6 | 90.6 | 96.7 | 98.1 | 94.6 | 86.3 | 172.5 |
| 250 | 79.8 | 79.6 | 81.3 | 81.5 | 79.9 | 81.1 | 82.2 | 85.6 | 90.4 | 97.2 | 97.6 | 94.2 | 85.8 | 172.7 |
| 315 | 80.7 | 81.0 | 81.1 | 79.7 | 81.9 | 82.6 | 82.8 | 86.1 | 92.0 | 96.5 | 95.8 | 92.8 | 84.4 | 172.1 |
| 400 | 78.6 | 82.0 | 83.8 | 83.5 | 84.0 | 83.8 | 83.7 | 86.8 | 91.1 | 95.3 | 93.6 | 89.9 | 81.4 | 171.0 |
| 500 | 79.4 | 81.0 | 82.6 | 83.8 | 82.6 | 83.7 | 83.9 | 86.9 | 90.8 | 94.7 | 92.2 | 86.7 | 78.4 | 170.4 |
| 630 | 78.0 | 79.7 | 82.1 | 81.9 | 82.7 | 84.5 | 84.5 | 87.3 | 90.0 | 93.3 | 90.2 | 84.9 | 77.2 | 169.8 |
| 800 | 77.6 | 79.3 | 81.2 | 81.9 | 81.8 | 84.6 | 83.8 | 86.4 | 89.4 | 91.7 | 88.4 | 83.1 | 75.8 | 169.1 |
| 1000 | 76.7 | 79.3 | 81.0 | 81.5 | 82.2 | 83.0 | 82.6 | 85.3 | 88.0 | 90.3 | 85.8 | 82.7 | 73.3 | 168.5 |
| 1250 | 76.5 | 79.3 | 80.4 | 81.1 | 82.3 | 83.1 | 81.9 | 84.8 | 85.3 | 87.4 | 83.3 | 78.1 | 70.7 | 167.3 |
| 1600 | 73.8 | 77.1 | 80.2 | 80.5 | 81.1 | 81.2 | 80.0 | 82.4 | 83.1 | 85.8 | 80.6 | 76.7 | 67.8 | 166.9 |
| 2000 | 69.1 | 73.9 | 76.7 | 78.8 | 80.9 | 81.1 | 78.2 | 80.3 | 81.5 | 82.3 | 77.1 | 73.2 | 63.9 | 166.4 |
| 2500 | 68.0 | 72.9 | 75.7 | 77.2 | 78.8 | 78.9 | 75.5 | 77.3 | 78.6 | 77.5 | 72.6 | 67.8 | 57.3 | 166.1 |
| 3150 | 58.8 | 66.9 | 69.8 | 71.9 | 74.8 | 74.5 | 71.6 | 73.7 | 72.2 | 66.2 | 57.4 | 44.4 | 44.4 | 164.9 |
| 4000 | 50.6 | 58.5 | 62.8 | 64.4 | 65.8 | 66.2 | 64.9 | 63.6 | 66.2 | 64.0 | 55.5 | 44.6 | 27.0 | 164.0 |
| 5000 | 35.6 | 43.3 | 51.5 | 55.8 | 59.9 | 59.3 | 55.4 | 53.7 | 55.5 | 50.5 | 39.9 | 25.9 | | 163.6 |
| 6300 | 15.6 | 25.9 | 35.7 | 40.3 | 41.9 | 42.6 | 40.1 | 37.3 | 39.3 | 30.4 | 16.4 | | | 162.7 |
| 8000 | | | 6.1 | 14.5 | 14.3 | 16.3 | 16.0 | 11.4 | 11.4 | 0.5 | | | | 161.2 |
| 10000 | | | | | | | | | | | | | | 158.9 |

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| | | | | | | | | | | | | | | |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| 013PL | 89.2 | 91.1 | 92.3 | 92.9 | 93.5 | 94.4 | 94.0 | 96.7 | 101.1 | 103.5 | 107.5 | 104.4 | 95.3 | 183.2 |
| PWL | 94.9 | 97.9 | 100.4 | 101.0 | 102.3 | 102.9 | 101.2 | 103.5 | 106.9 | 111.0 | 110.1 | 106.5 | 97.6 | |
| PWLT | 94.9 | 98.4 | 101.1 | 101.6 | 103.7 | 103.9 | 101.2 | 104.0 | 107.6 | 111.5 | 110.1 | 106.5 | 97.6 | |

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

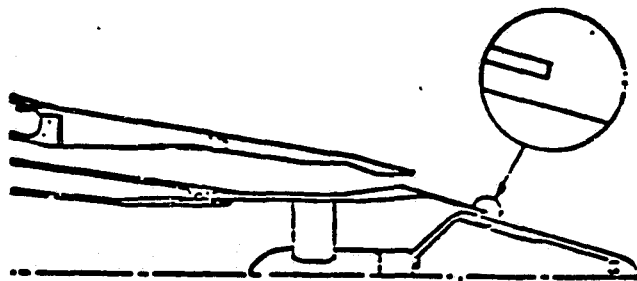
| | | | | | | | |
|-----------|--------------|------------|--------|-------|---------|-------|-------|
| TEST DATE | 03-29-78 | TAPE NO. | N313 | ALPHA | S859 | TAMP | 58.46 |
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH222 | PAMB | 29.5600 | RELUM | 13.30 |

| | | | | |
|-------|------------|-------------------------|-------------------------------------|---------------------------|
| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
| 0100A | 0126A | 731.5 M (2400.0 FT) SL | 9032.2 SQ CM (1400.00 SQ IN) - FULL | 118.87 M/SEC (390.0 FPS) |

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6.1.3 Measured Acoustic Data for Model 2

$R_F^o = 0.853$ C-D outer nozzle
 $R_F^i = 0.933$ Conic inner nozzle
 $A^i/A^o = 0.191$
without struts in outer flow



02/15/80 9.180

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X02010
BACKGROUND 0000000000 000000

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

OASPL

115.6

115.6

116.0

115.5

116.3

117.4

117.4

120.1

123.6

129.4

131.4

132.8

127.2

167.9

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OF POOR QUALITY

TEST DATE 03-23-78 TAPE NO. N312 ALPHA SB59 TAMB 54.50
LOCATION C41 ANECH CH AERO. RDG. ADH192 PAMB 29.4200 RELHUM 61.80

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 0. M/SEC (0. FPS)
O200 O201

203

02/15/80 9.180

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X02010

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 86.5 | 92.3 | 91.1 | 90.9 | 91.5 | 94.1 | 96.5 | 98.9 | 100.8 | 107.4 | 112.3 | 118.5 | 116.4 | 150.3 |
| 315 | 87.9 | 90.4 | 90.7 | 91.5 | 93.8 | 95.9 | 96.3 | 98.7 | 102.9 | 110.0 | 114.1 | 119.8 | 116.7 | 151.6 |
| 400 | 86.7 | 91.9 | 92.5 | 91.5 | 93.6 | 95.7 | 97.1 | 98.7 | 103.7 | 113.8 | 116.9 | 121.8 | 117.0 | 153.7 |
| 500 | 91.0 | 92.8 | 94.0 | 93.3 | 93.9 | 97.0 | 98.2 | 100.1 | 106.0 | 115.4 | 119.0 | 122.7 | 117.6 | 154.9 |
| 630 | 92.3 | 94.1 | 95.4 | 94.4 | 96.5 | 98.9 | 99.8 | 102.4 | 108.1 | 116.5 | 120.1 | 123.5 | 118.4 | 155.9 |
| 800 | 96.3 | 94.6 | 96.4 | 96.9 | 97.5 | 99.6 | 100.8 | 104.2 | 109.7 | 117.2 | 121.1 | 124.0 | 118.2 | 156.6 |
| 1000 | 101.2 | 101.5 | 101.5 | 99.5 | 99.4 | 101.2 | 102.6 | 105.3 | 111.2 | 117.3 | 121.4 | 123.9 | 117.8 | 156.7 |
| 1250 | 100.8 | 102.6 | 103.1 | 103.1 | 103.4 | 104.1 | 104.4 | 106.6 | 111.6 | 117.6 | 122.5 | 123.4 | 116.4 | 157.0 |
| 1600 | 108.6 | 104.2 | 102.9 | 101.2 | 101.8 | 103.4 | 104.6 | 106.5 | 112.4 | 117.5 | 122.7 | 121.7 | 114.2 | 156.5 |
| 2000 | 109.0 | 107.7 | 106.7 | 104.5 | 102.6 | 103.0 | 104.3 | 107.5 | 113.2 | 118.6 | 121.8 | 119.0 | 112.0 | 155.9 |
| 2500 | 107.3 | 108.1 | 108.6 | 107.6 | 107.0 | 105.3 | 105.2 | 108.4 | 112.8 | 119.7 | 119.6 | 118.1 | 110.6 | 155.5 |
| 3150 | 105.6 | 106.1 | 106.6 | 106.9 | 107.7 | 108.1 | 106.7 | 109.1 | 113.6 | 119.2 | 118.1 | 116.9 | 109.9 | 155.0 |
| 4000 | 103.9 | 103.9 | 105.4 | 104.7 | 105.8 | 107.6 | 108.0 | 109.4 | 112.7 | 118.0 | 117.0 | 115.4 | 108.2 | 154.0 |
| 5000 | 103.3 | 104.1 | 104.3 | 104.3 | 104.7 | 106.5 | 108.4 | 110.6 | 112.1 | 118.2 | 115.9 | 114.1 | 107.8 | 153.8 |
| 6300 | 101.6 | 103.2 | 104.5 | 103.7 | 105.0 | 106.8 | 107.0 | 110.7 | 112.1 | 116.6 | 114.4 | 112.7 | 107.2 | 153.0 |
| 8000 | 100.7 | 103.1 | 104.0 | 103.8 | 104.6 | 106.3 | 106.1 | 109.4 | 111.9 | 115.0 | 113.3 | 111.7 | 106.2 | 152.4 |
| 10000 | 98.4 | 101.7 | 103.3 | 103.6 | 104.9 | 106.6 | 105.5 | 109.1 | 110.8 | 114.5 | 111.8 | 110.4 | 105.0 | 152.2 |
| 12500 | 95.5 | 99.6 | 101.0 | 102.2 | 104.2 | 105.4 | 104.3 | 107.2 | 108.6 | 112.4 | 109.2 | 108.8 | 103.3 | 151.1 |
| 16000 | 93.3 | 97.4 | 99.7 | 100.2 | 103.8 | 105.2 | 102.7 | 105.7 | 107.1 | 111.3 | 108.3 | 107.1 | 101.2 | 151.2 |
| 20000 | 88.0 | 94.8 | 96.1 | 97.8 | 101.7 | 103.0 | 100.6 | 102.6 | 105.1 | 108.4 | 106.0 | 103.9 | 99.1 | 150.4 |
| 25000 | 86.2 | 92.0 | 93.5 | 94.0 | 99.2 | 100.0 | 97.4 | 98.3 | 102.6 | 104.9 | 102.3 | 100.5 | 96.9 | 149.6 |
| 31500 | 84.4 | 87.8 | 91.0 | 92.9 | 93.4 | 94.4 | 93.9 | 95.9 | 99.5 | 104.1 | 99.5 | 96.0 | 91.4 | 150.0 |
| 40000 | 79.7 | 82.5 | 86.4 | 87.5 | 92.2 | 92.6 | 89.0 | 91.3 | 95.4 | 100.3 | 96.5 | 91.1 | 87.8 | 150.3 |
| 50000 | 72.3 | 78.1 | 79.0 | 81.2 | 84.3 | 85.7 | 84.8 | 85.6 | 91.8 | 96.1 | 91.5 | 87.1 | 82.4 | 149.9 |
| 63000 | 66.6 | 73.1 | 73.2 | 75.3 | 76.3 | 78.3 | 79.4 | 80.0 | 88.1 | 90.1 | 86.5 | 82.2 | 77.4 | 149.9 |
| 80000 | 61.0 | 65.9 | 67.7 | 70.4 | 70.1 | 72.7 | 72.1 | 75.0 | 83.9 | 85.3 | 81.8 | 75.3 | 70.7 | 151.9 |

OASPL 115.6 115.6 116.0 115.5 116.3 117.4 117.4 120.1 123.6 129.4 131.4 132.8 127.2 167.9

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000
FREE JET VELOCITY (FT/SEC) 0.
FREE JET DIAMETER (IN) 48.00
REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

TEST DATE 03-23-78
LOCATION C41 ANECH CH
TAPE NO. N312
AERO. RDG. ADH192
ALPHA SB59
PAMB 29.4200
TAMB 54.50
RELHUM 61.80

MODEL TEST POINT C201
ACOUSTIC RANGE 12.2 M (40.0 FT)
ARC 138.7 SQ CM (21.49 SQ IN) - MODEL
SIZE
FREE-JET SPEED
O. M/SEC (O. FPS)

ORIGINAL PAGE IS
OF POOR QUALITY

02/15/80 9.180

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMOOL X02011

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| 50 | 68.4 | 72.2 | 73.8 | 73.5 | 76.0 | 78.3 | 79.5 | 80.8 | 85.0 | 94.0 | 95.6 | 98.3 | 90.2 | 171.8 |
| 63 | 69.6 | 73.0 | 75.3 | 75.3 | 76.3 | 79.6 | 80.6 | 82.1 | 87.3 | 95.6 | 97.7 | 99.1 | 90.7 | 173.0 |
| 80 | 70.9 | 74.3 | 76.6 | 76.4 | 78.9 | 81.4 | 82.1 | 84.4 | 89.4 | 96.6 | 98.7 | 99.9 | 91.4 | 174.0 |
| 100 | 74.9 | 74.7 | 77.6 | 78.9 | 79.9 | 82.1 | 83.1 | 86.1 | 90.8 | 97.3 | 99.6 | 100.3 | 91.0 | 174.7 |
| 125 | 79.6 | 81.5 | 82.6 | 81.4 | 81.6 | 83.6 | 84.9 | 87.1 | 92.3 | 97.3 | 99.9 | 100.0 | 90.4 | 174.8 |
| 160 | 79.0 | 82.4 | 84.0 | 84.8 | 85.6 | 86.3 | 86.6 | 88.3 | 92.5 | 97.5 | 100.7 | 99.3 | 88.6 | 175.1 |
| 200 | 86.6 | 83.8 | 83.7 | 82.8 | 83.8 | 85.5 | 86.5 | 89.0 | 93.2 | 97.1 | 100.7 | 97.3 | 86.0 | 174.7 |
| 250 | 86.6 | 87.1 | 87.3 | 85.8 | 84.4 | 84.9 | 86.1 | 88.8 | 93.8 | 97.9 | 99.4 | 94.1 | 83.1 | 174.0 |
| 315 | 84.6 | 87.1 | 88.8 | 88.7 | 88.5 | 87.0 | 86.7 | 89.4 | 93.1 | 98.7 | 96.9 | 92.7 | 80.9 | 173.7 |
| 400 | 82.3 | 84.7 | 86.5 | 87.6 | 88.9 | 89.4 | 87.9 | 89.9 | 93.5 | 97.8 | 94.9 | 90.8 | 79.2 | 173.1 |
| 500 | 80.1 | 82.1 | 85.0 | 85.1 | 86.7 | 88.7 | 88.9 | 89.9 | 92.2 | 96.3 | 93.2 | 88.7 | 76.5 | 172.1 |
| 630 | 79.0 | 81.9 | 83.6 | 84.5 | 85.3 | 87.3 | 89.1 | 90.7 | 91.3 | 96.0 | 91.6 | 86.7 | 75.1 | 171.9 |
| 800 | 76.9 | 80.7 | 83.4 | 83.6 | 85.4 | 87.4 | 87.4 | 90.6 | 91.0 | 94.0 | 89.7 | 84.6 | 73.3 | 171.1 |
| 1000 | 75.5 | 80.3 | 82.7 | 83.5 | 84.9 | 86.7 | 86.4 | 89.1 | 90.6 | 92.2 | 88.1 | 83.0 | 71.2 | 170.5 |
| 1250 | 72.8 | 78.5 | 81.8 | 83.1 | 85.1 | 86.9 | 86.5 | 88.6 | 89.3 | 91.3 | 86.2 | 80.8 | 68.5 | 170.3 |
| 1600 | 69.0 | 75.8 | 79.0 | 81.4 | 84.1 | 85.4 | 84.2 | 86.4 | 86.7 | 88.6 | 82.6 | 77.9 | 64.5 | 169.2 |
| 2000 | 65.8 | 73.0 | 77.4 | 79.1 | 83.4 | 85.2 | 82.4 | 84.6 | 84.8 | 86.9 | 80.8 | 74.5 | 59.4 | 169.4 |
| 2500 | 58.7 | 69.2 | 72.9 | 76.1 | 80.8 | 82.4 | 79.8 | 80.9 | 81.9 | 82.8 | 76.7 | 68.6 | 52.3 | 168.6 |
| 3150 | 53.5 | 64.0 | 68.4 | 70.8 | 76.9 | 78.1 | 75.1 | 75.1 | 76.9 | 69.6 | 60.1 | 41.8 | 167.7 | |
| 4000 | 45.5 | 55.0 | 62.1 | 66.4 | 68.2 | 69.6 | 68.7 | 69.4 | 70.6 | 71.4 | 60.6 | 46.8 | 21.8 | 168.2 |
| 5000 | 31.0 | 42.2 | 51.3 | 55.6 | 62.0 | 62.9 | 58.8 | 59.4 | 60.3 | 60.0 | 47.9 | 28.1 | | 168.5 |
| 6300 | 5.8 | 23.5 | 31.8 | 38.5 | 44.0 | 46.2 | 44.5 | 42.9 | 44.6 | 41.6 | 25.1 | | | 168.1 |
| 8000 | | 4.6 | 13.3 | 17.8 | 21.0 | 21.0 | 18.0 | 19.5 | 10.7 | | | | | 170.0 |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

ORIGINAL PAGE IS
OF POOR QUALITY

| | | | | | | | | | | | | | | |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| DASPL | 92.8 | 94.2 | 95.8 | 96.1 | 97.2 | 98.4 | 98.3 | 100.5 | 103.5 | 108.3 | 109.1 | 108.3 | 98.8 | 185.8 |
| PWL | 97.0 | 99.8 | 102.1 | 102.8 | 105.3 | 106.8 | 105.5 | 107.6 | 109.6 | 113.5 | 112.2 | 108.9 | 98.2 | |
| PWLT | 98.2 | 99.8 | 102.1 | 102.8 | 106.6 | 107.9 | 106.0 | 107.6 | 110.1 | 114.2 | 113.3 | 108.9 | 99.2 | |

DIAMETER RATIO 8.070 FREQUENCY SHIFT -9

TEST DATE 03-23-78 TAPE NO. N312 TAPB 54.50
LOCATION C41 ANECH CH AERO. RDG. ADH192 PAMP 29.4200 RELHUM 61.80

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
O200 O201 731.5 M (2400.0 FT) SL 9032.2 50 CM (1400.00 50 IN) - FULL O. M/SEC (O. FPS)

02/15/80 9.180

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X02020
BACKGROUND FJB300-FMODL X05230

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ
50
63
80

100

125

160

200

250 83.0 87.1 87.3 87.9 88.0 90.1 93.0 95.6 97.6 103.9 109.5 116.2 113.6 147.7,
315 84.9 86.6 87.4 87.7 90.1 92.2 93.1 95.0 99.2 106.7 111.1 117.8 114.5 149.2
400 86.6 87.9 88.7 88.0 90.3 92.4 93.1 95.5 100.2 110.5 114.7 119.6 113.8 151.1
500 87.4 88.3 90.3 89.8 91.4 93.5 94.7 96.8 101.8 112.9 116.5 120.2 112.6 152.1
630 87.9 89.9 91.4 91.2 93.3 94.6 96.0 98.9 104.4 113.7 118.1 120.5 110.7 152.9
800 91.6 90.6 92.4 93.2 93.8 96.1 97.5 100.9 106.4 114.7 118.9 120.5 108.9 153.4
1000 94.2 93.7 95.7 94.5 95.6 97.5 99.4 102.0 108.7 115.0 119.2 119.1 107.0 153.2
1250 98.5 98.0 98.1 96.8 98.2 99.6 100.7 104.1 109.1 115.1 120.5 119.2 105.6 153.9
1600 105.8 103.9 102.2 99.7 98.5 100.7 101.5 104.5 109.9 115.5 121.0 118.7 105.7 154.2
2000 105.5 105.7 106.2 104.3 101.8 100.2 101.6 105.0 110.7 116.5 120.8 117.2 105.3 154.3
2500 104.1 105.1 106.3 105.4 105.7 104.3 103.2 105.4 110.3 117.4 119.9 115.4 104.1 154.0
3150 102.1 102.8 102.8 104.1 106.2 107.8 105.9 106.9 111.6 117.2 118.6 113.8 102.6 153.5
4000 101.3 100.9 101.9 101.4 102.7 105.6 107.0 107.7 111.1 116.7 116.4 111.4 100.9 152.4
5000 101.0 101.0 101.3 101.3 102.1 104.2 106.6 109.3 111.3 116.7 115.3 110.0 99.8 152.2
6300 99.3 100.9 101.9 101.2 101.9 104.3 105.2 109.4 111.5 115.0 114.1 108.7 99.1 151.5
8000 100.4 100.8 101.4 101.3 102.6 104.0 104.5 107.9 110.8 113.9 112.2 106.9 97.9 150.8
10000 98.6 100.5 101.4 100.7 102.1 104.2 103.6 107.4 110.7 112.9 111.0 106.7 97.1 150.6
12500 95.6 97.2 98.8 100.3 101.3 102.7 102.2 105.1 107.9 111.2 108.5 104.7 95.6 149.4
15000 93.9 95.4 97.5 98.4 101.0 102.2 100.7 103.4 106.3 109.7 106.5 103.1 94.8 149.3
20000 89.0 93.2 94.0 95.9 99.6 101.1 98.1 100.3 104.0 106.7 104.2 100.4 92.6 148.5
25000 87.3 90.1 91.6 91.6 96.8 97.9 95.2 96.2 101.2 102.4 100.6 96.6 90.6 147.4
31500 84.7 86.0 89.2 90.7 91.7 92.4 91.7 93.2 98.5 101.3 97.9 92.3 86.2 147.8
40000 80.7 80.9 84.5 85.7 89.2 90.6 86.5 88.0 94.0 96.8 93.9 86.5 81.5 147.6
50000 73.7 76.1 77.3 79.1 81.5 83.1 81.4 81.7 89.8 91.6 89.1 81.2 75.6 146.6
63000 68.4 70.8 70.7 72.9 73.4 74.9 76.1 75.5 85.6 86.2 81.8 75.0 70.1 146.3
80000 62.8 63.9 65.2 67.6 66.7 69.5 67.9 69.0 79.7 82.4 77.5 65.9 62.3 148.1

OASPL 112.8 113.0 113.6 113.0 113.9 115.3 115.4 118.0 121.9 127.4 130.0 129.6 121.4 165.6

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 46.94
LOCATION C41 ANECH CH AERO. RDG. ADH199 PAMB 29.4300 RELHUM 83.10

MODEL TEST POINT O202 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 90.22 M/SEC (296.0 FPS) FREE-JET SPEED

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OF POOR QUALITY

02/15/80 9.180

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X02020

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250 88.4 91.5 90.7 90.2 89.1 90.1 91.5 92.9 96.5 103.4 107.3 114.3 112.3 146.0
315 88.4 91.5 90.7 90.2 89.1 90.1 91.5 92.9 96.5 103.4 107.3 114.3 112.3 146.0
400 90.4 91.3 91.0 90.5 91.6 92.6 92.4 93.8 100.3 110.9 114.4 118.9 113.8 150.8
500 92.1 92.5 92.3 92.3 92.8 93.7 94.1 95.4 103.3 112.4 116.8 120.7 114.1 152.6
600 93.0 92.9 93.9 93.7 94.6 94.8 95.5 97.6 105.7 113.8 118.3 121.9 114.7 153.9
800 93.4 94.5 95.0 95.7 95.2 96.4 97.0 99.7 108.1 114.3 119.0 121.4 114.6 154.0
1000 96.8 95.1 95.9 96.7 96.9 97.8 98.8 100.7 108.3 114.3 120.2 121.4 113.2 154.4
1250 98.4 97.4 98.8 98.7 99.3 100.0 100.2 102.7 109.2 114.7 120.7 120.9 113.4 154.6
1600 102.5 101.4 100.7 102.1 99.9 101.2 101.1 103.1 110.0 115.7 120.4 119.4 113.0 154.3
2000 111.1 108.3 105.6 106.5 103.2 100.9 101.3 103.7 109.7 116.6 119.5 117.5 111.8 154.1
2500 110.3 109.8 109.3 107.5 107.2 105.2 103.0 104.2 111.2 116.5 118.3 116.0 110.3 153.9
3150 107.6 108.2 109.0 107.2 108.3 108.9 106.0 105.9 111.0 116.3 116.3 113.6 108.5 153.2
4000 107.5 107.5 106.7 104.6 105.1 107.0 107.3 107.3 105.9 111.5 116.7 115.7 112.7 107.6 152.9
5000 106.7 105.6 105.8 104.6 104.7 106.0 107.3 109.0 112.5 115.7 115.1 112.0 107.6 152.6
6300 105.7 105.4 105.1 104.9 104.9 106.5 106.4 109.6 112.4 115.1 113.5 110.4 106.6 152.3
8000 104.5 105.6 106.0 105.3 106.0 106.8 106.3 108.6 112.4 114.2 112.5 110.4 105.9 152.3
10000 105.4 105.4 105.9 104.9 105.7 107.2 105.4 108.2 109.9 112.8 110.2 108.6 104.7 151.6
12500 103.3 104.9 105.3 104.5 104.9 105.7 104.0 105.8 108.8 111.8 108.8 107.6 104.4 151.3
16000 99.8 101.0 102.2 103.4 105.0 105.2 102.6 104.2 106.9 109.3 106.9 105.3 102.6 150.8
20000 99.6 100.5 101.7 101.0 103.6 104.1 100.0 101.1 105.1 106.0 104.5 102.9 102.5 150.5
25000 94.1 97.7 97.7 96.6 100.8 100.9 97.5 97.3 102.8 105.1 102.0 98.6 97.6 150.2
31500 91.7 93.8 94.4 94.9 95.3 95.4 93.5 93.9 99.2 101.6 98.9 93.7 93.8 149.5
40000 86.3 87.2 90.0 90.8 93.2 93.6 88.4 88.8 95.4 96.7 94.4 88.7 88.3 149.4
50000 83.8 83.4 86.1 84.2 85.5 86.1 83.3 82.5 92.1 92.4 88.1 83.5 83.7 148.7
63000 75.9 77.6 77.9 77.1 77.0 77.9 78.0 76.4 87.6 90.0 85.3 75.8 77.4 149.5
80000 67.2 69.2 68.6 71.9 70.3 72.5 69.7 69.7 77.8 80.2 75.5 66.0 67.6 147.2

OASPL 117.6 117.2 117.0 116.2 116.5 117.1 116.1 117.8 122.3 127.1 129.6 130.4 124.3 166.2

MODEL/FULL SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 296.00 REFRACTION CORRECTION - YES
INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULENCE CORRECTION - YES

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 46.94
LOCATION C41 ANECH CH AERO. RDG. ADH199 PAMB 29.4300 RELHUM 83.10

MODEL TEST POINT 0200 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 90.22 M/SEC (296.0 FPS) FREE-JET SPEED

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FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X02021

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 69.1 | 71.5 | 72.3 | 72.5 | 74.1 | 75.1 | 74.8 | 75.8 | 81.6 | 91.1 | 93.1 | 95.4 | 86.9 | 168.9 |
| 63 | 70.7 | 72.7 | 73.5 | 74.3 | 75.2 | 76.2 | 76.5 | 77.4 | 84.6 | 92.6 | 95.5 | 97.1 | 87.2 | 170.7 |
| 80 | 71.6 | 73.1 | 75.1 | 75.7 | 77.0 | 77.4 | 77.8 | 79.6 | 86.9 | 94.0 | 96.9 | 98.3 | 87.7 | 172.0 |
| 100 | 72.0 | 74.6 | 76.2 | 77.6 | 77.5 | 78.9 | 79.3 | 81.6 | 89.3 | 94.4 | 97.5 | 97.6 | 87.5 | 172.1 |
| 125 | 75.3 | 75.1 | 77.0 | 78.6 | 79.2 | 80.2 | 81.1 | 82.5 | 89.4 | 94.3 | 98.6 | 97.5 | 85.8 | 172.5 |
| 160 | 76.7 | 77.3 | 79.7 | 80.4 | 81.5 | 82.3 | 82.3 | 84.4 | 90.2 | 94.5 | 98.9 | 96.8 | 85.7 | 172.7 |
| 200 | 80.5 | 81.0 | 81.4 | 83.6 | 81.9 | 83.3 | 83.1 | 84.7 | 90.8 | 95.3 | 98.4 | 95.0 | 84.8 | 172.4 |
| 250 | 88.8 | 87.7 | 86.2 | 87.8 | 85.0 | 82.8 | 83.0 | 85.1 | 90.3 | 96.0 | 97.1 | 92.6 | 83.0 | 172.2 |
| 315 | 87.6 | 88.8 | 89.6 | 88.6 | 88.7 | 86.9 | 84.5 | 85.3 | 91.4 | 95.5 | 95.6 | 90.6 | 80.6 | 172.1 |
| 400 | 84.4 | 86.8 | 88.9 | 87.9 | 89.5 | 90.3 | 87.2 | 86.6 | 90.9 | 95.0 | 93.1 | 87.6 | 77.8 | 171.4 |
| 500 | 83.8 | 85.8 | 86.3 | 85.1 | 86.0 | 88.1 | 88.2 | 87.4 | 91.2 | 94.9 | 91.9 | 85.9 | 75.9 | 171.0 |
| 630 | 82.4 | 83.4 | 85.1 | 84.8 | 85.3 | 86.8 | 88.0 | 89.1 | 91.7 | 93.5 | 90.9 | 84.6 | 74.9 | 170.8 |
| 800 | 81.0 | 82.8 | 84.0 | 84.8 | 85.3 | 87.1 | 86.8 | 89.5 | 91.3 | 92.5 | 88.8 | 82.3 | 72.7 | 170.4 |
| 1000 | 79.3 | 82.7 | 84.7 | 85.1 | 86.3 | 87.2 | 86.6 | 88.3 | 91.1 | 91.3 | 87.3 | 81.7 | 70.9 | 170.4 |
| 1250 | 79.7 | 82.2 | 84.0 | 84.5 | 85.8 | 87.5 | 85.6 | 87.7 | 88.4 | 89.6 | 84.6 | 79.1 | 68.2 | 169.8 |
| 1600 | 76.8 | 81.2 | 83.4 | 83.7 | 84.8 | 85.8 | 83.9 | 85.0 | 86.9 | 88.0 | 82.3 | 76.7 | 65.6 | 169.4 |
| 2000 | 72.3 | 76.7 | 79.9 | 82.4 | 84.7 | 85.2 | 82.3 | 83.1 | 84.6 | 84.9 | 79.4 | 72.7 | 60.8 | 168.9 |
| 2500 | 70.3 | 74.9 | 78.5 | 79.3 | 82.7 | 83.5 | 79.1 | 79.4 | 81.9 | 80.4 | 75.2 | 67.6 | 55.8 | 168.7 |
| 3150 | 61.5 | 69.7 | 72.6 | 73.4 | 78.6 | 79.0 | 75.2 | 74.0 | 77.7 | 77.1 | 69.4 | 58.3 | 42.5 | 168.3 |
| 4000 | 52.8 | 61.0 | 65.5 | 68.3 | 70.1 | 70.6 | 68.3 | 67.4 | 70.3 | 68.9 | 60.0 | 44.4 | 24.2 | 167.7 |
| 5000 | 37.6 | 46.9 | 54.8 | 58.8 | 63.0 | 63.9 | 58.2 | 56.9 | 60.2 | 56.4 | 45.8 | 25.8 | | 167.5 |
| 6300 | 17.3 | 28.8 | 38.9 | 41.4 | 45.2 | 46.6 | 43.0 | 39.7 | 44.9 | 37.8 | 21.6 | | | 166.8 |
| 8000 | | | 9.4 | 15.1 | 18.5 | 20.6 | 19.6 | 14.4 | 19.1 | 10.6 | | | | 167.6 |
| 10000 | | | | | | | | | | | | | | 165.4 |

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| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| OASPL | 94.2 | 95.4 | 96.5 | 96.6 | 97.2 | 97.9 | 96.9 | 98.0 | 102.0 | 105.9 | 107.3 | 106.0 | 95.7 | 184.2 |
| PNL | 99.7 | 101.7 | 103.5 | 104.3 | 105.9 | 106.7 | 104.6 | 105.4 | 108.6 | 111.2 | 110.4 | 106.7 | 96.2 | |
| PNLT | 100.5 | 101.7 | 104.2 | 104.3 | 107.1 | 107.9 | 104.6 | 105.4 | 109.2 | 111.2 | 111.5 | 106.7 | 96.2 | |

DIAMETER RATIO 8.070 FREQUENCY SHIFT -9

| | | | | | | | |
|-----------|--------------|------------|--------|--------|---------|--------|-------|
| TEST DATE | 03-23-78 | TAPE NO. | N312 | IALPHA | SB59 | TAMS | 46.94 |
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH199 | PAMB | 29.4300 | RELHUM | 83.10 |

| | | | | |
|-------|------------|-------------------------|-------------------------------------|--------------------------|
| MODEL | TEST POINT | ACUSTIC RANGE | SIZE | FREE-JET SPEED |
| O200 | O202 | 731.5 M (2400.0 FT) SL | 9032.2 SQ CM (1400.00 SQ IN) - FULL | 90.22 M/SEC (296.0 FPS) |

02/15/80 9.180

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FU-400-FMODL X02030
BACKGROUND FJB400-FMODL X05220

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

| | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 82.9 | 86.5 | 87.0 | 87.4 | 89.5 | 91.9 | 94.6 | 97.1 | 103.6 | 108.8 | 115.5 | 113.1 | 147.1 |
| 315 | 84.3 | 86.1 | 86.6 | 88.7 | 90.9 | 91.8 | 93.9 | 98.4 | 106.5 | 110.9 | 117.6 | 113.2 | 148.8 |
| 400 | 86.4 | 86.7 | 88.2 | 86.9 | 88.8 | 91.4 | 92.3 | 94.7 | 99.4 | 109.5 | 113.7 | 118.8 | 112.0 |
| 500 | 86.6 | 88.0 | 89.8 | 89.0 | 90.4 | 92.5 | 94.4 | 96.6 | 101.3 | 112.4 | 116.0 | 118.7 | 109.6 |
| 630 | 86.3 | 89.3 | 90.9 | 90.1 | 93.0 | 94.1 | 95.5 | 98.2 | 103.6 | 113.4 | 117.3 | 118.5 | 106.7 |
| 800 | 90.3 | 90.1 | 91.6 | 92.2 | 92.7 | 95.1 | 97.0 | 99.9 | 105.9 | 114.2 | 118.4 | 117.0 | 104.7 |
| 1000 | 93.4 | 93.0 | 94.0 | 93.5 | 94.1 | 97.0 | 98.1 | 101.3 | 107.5 | 115.0 | 118.2 | 114.9 | 103.3 |
| 1250 | 99.8 | 101.8 | 98.6 | 97.3 | 97.2 | 98.6 | 99.7 | 102.8 | 108.6 | 115.1 | 119.0 | 114.4 | 102.9 |
| 1600 | 106.6 | 105.2 | 104.2 | 101.5 | 98.5 | 99.7 | 101.5 | 104.2 | 109.2 | 115.0 | 120.0 | 114.5 | 103.5 |
| 2000 | 105.0 | 106.7 | 106.3 | 105.5 | 102.1 | 100.0 | 100.8 | 104.3 | 110.2 | 115.8 | 119.0 | 114.2 | 103.5 |
| 2500 | 103.3 | 104.6 | 106.3 | 106.4 | 106.7 | 104.6 | 102.7 | 105.4 | 109.8 | 117.2 | 119.1 | 114.4 | 103.4 |
| 3150 | 101.1 | 102.1 | 103.1 | 103.9 | 105.7 | 107.8 | 106.2 | 107.1 | 111.1 | 116.7 | 117.6 | 113.3 | 102.8 |
| 4000 | 100.6 | 100.9 | 102.4 | 101.4 | 102.7 | 105.1 | 107.0 | 107.9 | 110.9 | 115.5 | 115.4 | 111.4 | 100.4 |
| 5000 | 100.2 | 100.8 | 101.5 | 101.9 | 103.7 | 106.4 | 109.5 | 111.0 | 116.2 | 114.3 | 109.5 | 100.0 | 151.7 |
| 6300 | 99.6 | 100.4 | 101.9 | 101.4 | 101.9 | 104.3 | 105.0 | 108.7 | 112.0 | 115.0 | 113.1 | 108.4 | 99.4 |
| 8000 | 99.4 | 100.8 | 100.9 | 101.3 | 102.6 | 103.5 | 104.8 | 108.1 | 111.6 | 113.9 | 112.2 | 107.1 | 98.4 |
| 10000 | 98.1 | 99.5 | 101.4 | 101.2 | 102.3 | 104.0 | 103.6 | 107.4 | 110.2 | 113.1 | 110.2 | 106.7 | 97.1 |
| 12500 | 95.1 | 96.9 | 99.3 | 100.6 | 101.3 | 102.5 | 102.2 | 105.3 | 107.7 | 110.0 | 108.0 | 104.4 | 95.9 |
| 16000 | 92.9 | 95.4 | 98.0 | 98.9 | 101.5 | 102.8 | 100.7 | 103.4 | 106.3 | 109.7 | 106.0 | 102.9 | 94.8 |
| 20000 | 88.5 | 93.0 | 94.6 | 96.2 | 99.9 | 101.2 | 98.9 | 101.1 | 103.8 | 106.8 | 103.5 | 100.3 | 93.1 |
| 25000 | 87.1 | 89.6 | 91.6 | 92.4 | 96.8 | 97.9 | 95.5 | 95.9 | 101.2 | 101.5 | 99.9 | 96.4 | 91.1 |
| 31500 | 84.5 | 85.3 | 89.2 | 90.9 | 91.7 | 92.2 | 92.2 | 92.9 | 97.5 | 100.8 | 96.5 | 91.6 | 85.7 |
| 40000 | 80.2 | 80.9 | 84.3 | 86.5 | 90.0 | 90.3 | 87.0 | 88.8 | 93.3 | 95.9 | 91.7 | 86.1 | 82.3 |
| 50000 | 73.2 | 76.1 | 77.0 | 79.6 | 81.7 | 83.4 | 81.9 | 82.2 | 88.3 | 90.6 | 86.4 | 81.0 | 75.4 |
| 63000 | 67.9 | 71.1 | 70.9 | 72.9 | 73.4 | 74.4 | 76.1 | 76.0 | 84.1 | 84.5 | 82.0 | 74.8 | 70.1 |
| 80000 | 61.8 | 63.9 | 65.0 | 68.1 | 66.4 | 69.2 | 67.9 | 70.0 | 78.4 | 79.9 | 76.0 | 65.6 | 62.8 |
| OASPL | 112.5 | 113.3 | 113.9 | 113.5 | 114.0 | 115.1 | 115.3 | 117.9 | 121.6 | 126.9 | 129.0 | 127.6 | 119.6 |

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TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 47.30
LOCATION C41 ANECH CH AERO. RDG. ADH198 PAMB 29.4300 RELHUM 81.60

MODEL TEST POINT 0200 0203 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 120.70 M/SEC (396.0 FPS) FREE-JET SPEED

209

02/15/80 9.180

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FU-400-FMODL X02030

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250 89.7 92.2 90.9 90.0 88.8 89.5 90.0 91.0 95.0 102.2 106.0 113.2 110.6 144.8

315 89.7 92.2 90.9 90.0 90.5 91.1 90.4 91.2 96.7 105.9 109.6 115.5 111.2 147.1

400 91.9 92.4 91.2 90.0 90.4 91.7 91.4 92.5 99.6 110.2 113.7 117.7 112.0 149.7

500 92.8 92.2 92.6 90.0 92.2 92.8 93.7 94.9 102.3 111.8 115.9 119.1 111.8 151.3

630 93.7 94.0 94.5 92.3 94.9 94.5 94.8 96.5 104.7 112.9 117.5 118.9 112.6 152.0

800 93.9 95.7 95.8 93.6 94.7 95.6 96.3 98.1 106.6 114.1 118.0 118.0 113.7 152.2

1000 97.3 96.1 96.4 95.5 95.2 97.6 97.5 99.5 107.7 114.1 118.7 117.6 113.4 152.5

1250 99.1 97.9 98.0 96.5 98.3 99.3 99.1 101.1 108.6 114.2 119.9 117.9 114.3 153.3

1600 106.5 107.3 102.8 100.2 100.6 100.7 100.7 102.7 109.9 115.4 119.4 118.1 114.7 153.7

2000 113.9 111.3 109.0 104.8 104.2 101.2 100.8 103.1 109.8 117.0 119.7 118.4 114.9 155.0

2500 111.5 112.2 111.0 108.6 109.4 106.1 103.0 104.5 111.6 117.1 118.8 118.0 115.0 155.1

3150 109.3 110.0 111.0 110.0 108.9 109.8 106.9 106.7 111.9 116.2 116.8 116.1 112.5 154.2

4000 108.6 108.6 108.6 108.2 106.4 107.6 108.2 107.9 111.9 116.7 115.3 113.8 111.7 153.5

5000 108.1 107.5 108.1 106.0 105.9 106.7 107.9 109.7 113.0 115.6 114.2 112.7 111.0 153.1

6300 107.6 107.4 107.6 106.4 106.0 107.3 106.5 108.8 112.7 114.6 113.4 111.5 110.1 152.6

8000 106.8 106.9 107.5 106.1 106.6 106.5 106.2 108.2 111.5 114.0 111.6 111.3 109.1 152.3

10000 106.4 107.1 106.4 105.7 106.4 107.0 105.1 107.5 109.5 111.4 110.0 109.8 108.7 151.6

12500 104.9 105.6 106.6 105.5 105.4 105.5 103.7 105.6 108.6 111.7 108.5 108.7 108.0 151.6

16000 101.4 102.5 104.0 104.3 106.1 105.8 102.4 103.7 106.8 109.6 106.9 107.0 107.3 151.5

20000 101.5 102.8 103.9 103.3 104.4 104.2 100.8 101.7 105.9 105.0 104.7 106.6 151.6

25000 96.5 99.8 99.9 100.0 101.4 100.9 97.8 97.3 101.5 104.3 100.5 98.9 100.5 150.4

31500 94.3 95.6 96.2 95.4 95.8 95.2 93.8 93.1 98.7 100.9 97.4 95.1 98.8 149.7

40000 88.1 88.2 91.2 92.0 94.5 93.3 89.1 89.5 93.5 95.4 91.6 89.4 91.2 149.2

50000 86.1 85.7 87.6 88.3 86.3 86.4 83.6 82.5 90.1 90.0 87.9 83.8 86.3 148.6

63000 78.2 80.0 79.4 80.5 77.4 77.4 77.5 76.1 85.8 86.8 83.3 75.9 79.9 148.1

80000 68.7 71.2 70.1 71.1 70.5 72.2 69.3 70.0 76.0 77.0 73.5 66.1 70.1 145.9

OASPL 119.5 119.3 118.9 117.5 117.5 117.5 116.3 117.7 122.3 126.9 129.0 129.0 125.1 166.0

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 396.00 REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-23-78 TAPE NO. N312 ALPHA SB59 TAMB 47.30
 LOCATION C41 ANECH CH AERO. RDG. ADH198 PAMB 29.4300 RELHUM 81.60

MODEL TEST POINT 0203 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 120.70 M/SEC (396.0 FPS) SIZE FREQ-JET SPEED

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02/15/80 9.180

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X02031

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 70.6 | 72.7 | 72.5 | 72.0 | 72.9 | 74.2 | 73.8 | 74.5 | 80.9 | 90.4 | 92.4 | 94.2 | 85.1 | 167.9 |
| 63 | 71.5 | 72.4 | 73.8 | 72.0 | 74.6 | 75.4 | 76.1 | 76.9 | 83.6 | 92.0 | 94.6 | 95.6 | 84.9 | 169.4 |
| 80 | 72.4 | 74.2 | 75.8 | 74.3 | 77.3 | 77.0 | 77.2 | 78.4 | 86.0 | 93.0 | 96.1 | 95.3 | 85.6 | 170.2 |
| 100 | 72.4 | 75.8 | 77.0 | 75.5 | 77.0 | 78.1 | 78.6 | 80.0 | 87.8 | 94.2 | 96.5 | 94.3 | 86.6 | 170.4 |
| 125 | 75.7 | 76.1 | 77.5 | 77.4 | 78.2 | 80.0 | 79.7 | 81.3 | 88.8 | 94.2 | 97.2 | 93.7 | 86.0 | 170.7 |
| 160 | 77.3 | 77.8 | 79.0 | 78.2 | 81.1 | 81.6 | 81.3 | 82.8 | 89.5 | 94.1 | 98.2 | 93.8 | 86.5 | 171.5 |
| 200 | 84.5 | 87.0 | 83.6 | 81.8 | 82.6 | 82.8 | 82.7 | 84.3 | 90.7 | 95.0 | 97.3 | 93.6 | 86.5 | 171.8 |
| 250 | 91.5 | 90.7 | 89.5 | 86.2 | 86.0 | 83.1 | 82.6 | 84.4 | 90.4 | 96.4 | 97.4 | 93.6 | 86.0 | 173.1 |
| 315 | 88.8 | 91.2 | 91.2 | 89.7 | 90.9 | 87.8 | 84.5 | 85.5 | 91.8 | 96.1 | 96.0 | 92.6 | 85.3 | 173.2 |
| 400 | 86.1 | 88.6 | 90.9 | 90.8 | 90.1 | 91.2 | 88.1 | 87.4 | 91.8 | 94.9 | 93.5 | 90.0 | 81.8 | 172.4 |
| 500 | 84.8 | 86.9 | 88.2 | 88.6 | 87.3 | 88.7 | 89.1 | 88.4 | 91.5 | 94.9 | 91.6 | 87.1 | 80.0 | 171.6 |
| 630 | 83.8 | 85.4 | 87.3 | 86.2 | 86.6 | 87.6 | 88.5 | 89.8 | 92.2 | 93.4 | 89.9 | 85.3 | 78.3 | 171.2 |
| 800 | 82.9 | 84.9 | 86.5 | 86.2 | 86.4 | 87.9 | 86.9 | 88.6 | 91.6 | 92.1 | 88.6 | 83.4 | 76.2 | 170.8 |
| 1000 | 81.6 | 84.1 | 86.3 | 85.8 | 86.9 | 86.9 | 86.5 | 87.9 | 90.2 | 91.2 | 86.4 | 82.6 | 74.0 | 170.5 |
| 1250 | 80.8 | 83.9 | 84.8 | 85.3 | 86.5 | 87.3 | 85.2 | 87.1 | 87.9 | 88.2 | 84.4 | 80.3 | 72.2 | 169.8 |
| 1600 | 78.3 | 81.8 | 84.7 | 84.7 | 85.2 | 85.5 | 83.6 | 84.8 | 86.6 | 87.9 | 82.0 | 77.8 | 69.2 | 169.7 |
| 2000 | 73.9 | 78.1 | 81.6 | 83.2 | 85.8 | 85.7 | 82.0 | 82.6 | 84.5 | 85.2 | 79.4 | 74.4 | 65.5 | 169.6 |
| 2500 | 72.2 | 77.2 | 80.7 | 81.6 | 83.6 | 83.6 | 80.0 | 80.0 | 82.7 | 80.4 | 75.7 | 69.4 | 59.8 | 169.8 |
| 3150 | 63.8 | 71.7 | 74.8 | 76.8 | 79.2 | 79.0 | 75.6 | 74.0 | 76.4 | 76.3 | 67.8 | 58.6 | 45.3 | 168.5 |
| 4000 | 55.4 | 62.8 | 67.3 | 68.9 | 70.5 | 70.4 | 68.5 | 66.6 | 69.8 | 68.2 | 58.5 | 45.9 | 29.2 | 167.8 |
| 5000 | 39.5 | 47.9 | 56.1 | 60.0 | 64.3 | 63.7 | 58.8 | 57.5 | 58.4 | 55.1 | 42.9 | 26.4 | | 167.3 |
| 6300 | 19.7 | 31.1 | 40.4 | 45.5 | 46.0 | 46.8 | 43.3 | 39.7 | 42.9 | 35.5 | 21.5 | | | 166.7 |
| 8000 | | 0.6 | 10.9 | 18.5 | 19.0 | 20.1 | 19.1 | 14.1 | 17.3 | 7.5 | | | | 166.3 |
| 10000 | | | | | | | | | | | | | | 164.1 |

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OASPL 96.2 97.7 98.4 97.7 98.2 98.3 97.0 97.9 101.9 105.7 106.7 104.1 95.9 184.0
 PNLT 101.8 103.8 105.2 105.4 106.8 106.9 104.5 105.2 108.4 111.0 110.1 106.3 98.3
 PNLT 102.9 104.6 106.0 106.1 108.1 108.0 104.5 105.2 109.0 111.0 110.1 106.3 98.3

DIAMETER RATIO 8.070 FREQUENCY SHIFT -9

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 47.30
 LOCATION C41 ANECH CH AERO. RDG. ADH198 PAMB 29.4300 RELHUM 81.60

MODEL TEST POINT ACQUSTIC RANGE SIZE FREE-JET SPEED
 0200 0203 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 120.70 M/SEC (396.0 FPS)

02/15/80 9.180

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X02040
 BACKGROUND 0000000000 000000

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 89.0 | 93.8 | 93.1 | 92.9 | 93.2 | 95.8 | 98.2 | 100.6 | 103.1 | 110.2 | 114.8 | 121.0 | 117.9 | 152.6 |
| 315 | 90.6 | 92.4 | 92.9 | 93.2 | 95.8 | 97.7 | 98.3 | 100.2 | 104.9 | 113.0 | 116.9 | 122.1 | 118.7 | 154.0 |
| 400 | 92.7 | 93.9 | 94.2 | 93.7 | 95.3 | 97.7 | 98.8 | 101.0 | 106.7 | 116.3 | 119.9 | 124.3 | 118.5 | 156.2 |
| 500 | 93.0 | 95.0 | 96.5 | 96.1 | 96.7 | 99.5 | 100.4 | 102.8 | 107.8 | 118.1 | 121.0 | 124.4 | 118.8 | 156.8 |
| 630 | 94.8 | 96.1 | 97.1 | 96.7 | 98.0 | 100.9 | 101.5 | 104.7 | 110.4 | 119.5 | 122.3 | 124.8 | 119.7 | 157.7 |
| 800 | 99.1 | 97.4 | 98.7 | 98.7 | 99.3 | 101.6 | 102.8 | 106.4 | 112.5 | 120.5 | 123.6 | 125.8 | 119.9 | 158.8 |
| 1000 | 113.2 | 112.5 | 108.7 | 105.3 | 105.9 | 105.7 | 104.6 | 108.0 | 115.2 | 124.1 | 129.2 | 129.4 | 122.8 | 163.2 |
| 1250 | 110.3 | 109.8 | 108.1 | 107.6 | 105.7 | 106.1 | 105.9 | 109.1 | 114.6 | 120.9 | 125.5 | 125.2 | 118.1 | 159.6 |
| 1600 | 114.6 | 112.2 | 111.7 | 109.7 | 106.1 | 105.7 | 106.1 | 109.5 | 115.2 | 120.3 | 123.7 | 122.2 | 115.2 | 158.3 |
| 2000 | 111.2 | 111.0 | 112.0 | 112.5 | 112.4 | 110.2 | 106.6 | 110.0 | 116.7 | 121.6 | 122.5 | 120.8 | 112.8 | 158.3 |
| 2500 | 109.3 | 110.1 | 110.1 | 110.6 | 112.5 | 112.8 | 110.0 | 111.1 | 116.1 | 122.2 | 121.9 | 119.9 | 111.6 | 158.2 |
| 3150 | 109.1 | 109.6 | 109.6 | 108.9 | 110.2 | 112.3 | 112.7 | 112.4 | 116.8 | 121.7 | 120.6 | 118.4 | 110.1 | 157.7 |
| 4000 | 107.4 | 108.1 | 109.4 | 108.4 | 108.5 | 109.9 | 112.5 | 113.2 | 116.2 | 120.5 | 119.2 | 116.7 | 108.2 | 156.7 |
| 5000 | 107.3 | 108.1 | 108.6 | 108.4 | 109.4 | 110.8 | 110.9 | 114.3 | 115.6 | 120.0 | 118.1 | 115.6 | 107.5 | 156.3 |
| 6300 | 105.6 | 107.0 | 108.5 | 108.5 | 109.0 | 110.3 | 110.8 | 113.7 | 114.8 | 118.5 | 116.9 | 114.2 | 107.4 | 155.6 |
| 8000 | 105.2 | 106.4 | 107.0 | 107.6 | 108.9 | 109.8 | 109.6 | 112.7 | 114.7 | 117.8 | 115.5 | 112.7 | 105.5 | 155.2 |
| 10000 | 103.4 | 104.7 | 107.0 | 106.6 | 108.4 | 110.3 | 108.7 | 112.1 | 114.1 | 117.0 | 114.3 | 112.4 | 104.5 | 155.0 |
| 12500 | 100.3 | 102.9 | 104.2 | 105.0 | 107.2 | 108.6 | 107.6 | 110.0 | 111.6 | 114.6 | 112.2 | 110.1 | 103.5 | 153.8 |
| 16000 | 98.3 | 101.4 | 103.2 | 104.2 | 106.5 | 108.0 | 106.2 | 108.7 | 109.8 | 114.3 | 110.0 | 108.6 | 102.2 | 154.0 |
| 20000 | 93.5 | 99.1 | 99.9 | 101.8 | 104.7 | 106.0 | 103.6 | 105.9 | 108.3 | 111.4 | 108.5 | 105.2 | 100.6 | 153.4 |
| 25000 | 92.4 | 95.8 | 97.5 | 97.5 | 102.4 | 103.5 | 100.4 | 101.3 | 106.1 | 107.9 | 105.0 | 101.5 | 97.9 | 152.7 |
| 31500 | 90.9 | 92.1 | 95.2 | 96.4 | 97.2 | 98.1 | 97.1 | 99.2 | 102.8 | 106.4 | 101.0 | 97.8 | 91.4 | 152.8 |
| 40000 | 86.7 | 87.5 | 90.7 | 91.5 | 96.0 | 96.6 | 92.5 | 95.1 | 99.2 | 103.0 | 97.3 | 92.3 | 88.0 | 153.4 |
| 50000 | 78.8 | 83.1 | 84.2 | 86.5 | 88.3 | 90.5 | 89.0 | 89.3 | 96.0 | 98.1 | 92.8 | 88.8 | 82.4 | 152.9 |
| 63000 | 74.8 | 79.1 | 78.7 | 80.6 | 80.8 | 82.6 | 83.9 | 85.0 | 91.8 | 92.3 | 87.7 | 83.7 | 77.4 | 153.0 |
| 80000 | 69.0 | 73.7 | 74.2 | 76.6 | 75.1 | 77.9 | 76.8 | 80.5 | 86.9 | 88.8 | 83.5 | 76.6 | 70.9 | 155.3 |
| OASPL | 120.6 | 120.3 | 120.2 | 119.8 | 120.6 | 121.4 | 120.9 | 123.1 | 126.8 | 132.4 | 134.6 | 135.2 | 129.2 | 170.9 |

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TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 54.50
 LOCATION C41 ANECH CH AERO. RDG. ADH191 PAMB 29.4200 RELHJM 61.80

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 0. FREE-JET SPEED
 O200 O204 M/SEC (O. FPS)

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FU-ZER-FMODL X02040

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 89.0 | 93.8 | 93.1 | 92.9 | 93.2 | 95.8 | 98.2 | 100.6 | 103.1 | 110.2 | 114.8 | 121.0 | 117.9 | 152.6 |
| 315 | 90.6 | 92.4 | 92.9 | 93.2 | 95.8 | 97.7 | 98.3 | 100.2 | 104.9 | 113.0 | 116.9 | 122.1 | 118.7 | 154.0 |
| 400 | 92.7 | 93.9 | 94.2 | 93.7 | 95.3 | 97.7 | 98.8 | 101.0 | 106.7 | 116.3 | 119.9 | 124.3 | 118.5 | 156.2 |
| 500 | 93.0 | 95.0 | 96.5 | 96.1 | 96.7 | 99.5 | 100.4 | 102.8 | 107.8 | 118.1 | 121.0 | 124.4 | 118.8 | 156.8 |
| 630 | 94.8 | 96.1 | 97.1 | 96.7 | 98.0 | 100.9 | 101.5 | 104.7 | 110.4 | 119.5 | 122.3 | 124.8 | 119.7 | 157.7 |
| 800 | 99.1 | 97.4 | 98.7 | 98.7 | 99.3 | 101.6 | 102.8 | 106.4 | 112.2 | 120.5 | 123.6 | 125.8 | 119.9 | 158.8 |
| 1000 | 113.2 | 112.5 | 108.7 | 105.3 | 105.9 | 105.7 | 104.6 | 108.0 | 115.5 | 124.1 | 129.2 | 129.4 | 122.8 | 163.2 |
| 1250 | 110.3 | 109.8 | 108.1 | 105.6 | 105.7 | 106.1 | 105.1 | 109.1 | 114.6 | 120.9 | 125.5 | 125.2 | 118.1 | 159.6 |
| 1600 | 114.6 | 112.2 | 111.7 | 109.7 | 106.1 | 105.7 | 105.1 | 109.5 | 115.2 | 120.3 | 123.7 | 122.2 | 115.2 | 158.3 |
| 2000 | 111.2 | 111.0 | 112.0 | 112.5 | 112.4 | 110.2 | 106.6 | 110.0 | 116.7 | 121.6 | 122.5 | 120.8 | 112.8 | 158.3 |
| 2500 | 109.3 | 110.1 | 110.6 | 112.5 | 112.8 | 110.0 | 111.1 | 116.1 | 122.2 | 121.9 | 119.9 | 111.6 | 158.2 | |
| 3150 | 109.1 | 109.6 | 109.6 | 108.9 | 110.2 | 112.3 | 112.7 | 112.4 | 116.8 | 121.7 | 120.6 | 118.4 | 110.1 | 157.7 |
| 4000 | 108.4 | 108.1 | 109.4 | 108.4 | 108.5 | 109.9 | 112.5 | 113.2 | 116.2 | 120.5 | 119.2 | 116.7 | 108.2 | 156.7 |
| 5000 | 107.3 | 108.1 | 108.6 | 108.6 | 109.4 | 110.8 | 110.9 | 114.3 | 115.6 | 120.0 | 118.1 | 115.6 | 107.5 | 156.3 |
| 6300 | 105.6 | 107.0 | 108.5 | 108.5 | 109.0 | 110.3 | 110.8 | 113.7 | 114.8 | 118.6 | 116.9 | 114.2 | 107.4 | 155.6 |
| 8000 | 105.2 | 106.4 | 107.0 | 107.6 | 108.9 | 109.8 | 109.6 | 112.7 | 114.7 | 117.8 | 115.5 | 112.7 | 105.5 | 155.2 |
| 10000 | 103.4 | 104.7 | 107.0 | 106.6 | 108.4 | 110.3 | 108.7 | 112.1 | 114.1 | 117.0 | 114.3 | 112.4 | 104.5 | 155.0 |
| 12500 | 100.3 | 102.9 | 104.2 | 105.0 | 107.2 | 108.6 | 107.6 | 110.0 | 111.6 | 114.6 | 112.2 | 110.1 | 103.5 | 153.8 |
| 16000 | 98.3 | 101.4 | 103.2 | 104.2 | 106.5 | 108.0 | 106.2 | 108.7 | 109.8 | 114.3 | 110.0 | 108.6 | 102.2 | 154.0 |
| 20000 | 93.5 | 99.1 | 99.9 | 101.8 | 104.7 | 106.0 | 103.6 | 105.9 | 108.3 | 111.4 | 103.5 | 105.2 | 100.6 | 153.4 |
| 25000 | 92.4 | 95.8 | 97.5 | 97.5 | 102.4 | 103.5 | 100.4 | 101.3 | 106.1 | 107.9 | 105.0 | 101.5 | 97.9 | 152.7 |
| 31500 | 90.9 | 92.1 | 95.2 | 96.4 | 97.2 | 98.1 | 97.1 | 99.2 | 102.8 | 106.4 | 101.0 | 97.8 | 91.4 | 152.8 |
| 40000 | 86.7 | 87.5 | 90.7 | 91.5 | 96.0 | 96.6 | 92.5 | 95.1 | 99.2 | 103.0 | 97.3 | 92.3 | 88.0 | 153.4 |
| 50000 | 78.8 | 83.1 | 84.2 | 86.5 | 88.3 | 90.5 | 89.0 | 89.3 | 96.0 | 98.1 | 92.8 | 88.8 | 82.4 | 152.9 |
| 63000 | 74.8 | 79.1 | 78.7 | 80.6 | 80.8 | 82.6 | 83.9 | 85.0 | 91.8 | 92.3 | 87.7 | 83.7 | 77.4 | 153.0 |
| 80000 | 69.0 | 73.7 | 74.2 | 76.6 | 75.1 | 77.9 | 76.8 | 80.5 | 86.9 | 88.8 | 83.5 | 76.6 | 70.9 | 155.3 |
| OK SPL | 120.6 | 120.3 | 120.2 | 119.8 | 120.6 | 121.4 | 120.9 | 123.1 | 126.8 | 132.4 | 134.6 | 135.2 | 129.2 | 170.9 |

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MODEL/FULL SIZE SCALE FACTOR
INPUT 1.000 CALC. 1.000

FREE JET VELOCITY (FT/SEC)
FREE JET DIAMETER (IN)

REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

TEST DATE 03-23-78 TAPE NO. N312 ALPHA S859 TAMB 54.50
LOCATION C41 ANECH CH AERO. RDG. ADH191 PAMB 29.4200 RELHUM 61.80

MODEL TEST POINT 0200 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL SIZE 0. FREE-JET SPEED M/SEC (O. FPS)

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X02041

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|
| 50 | 71.4 | 74.2 | 75.5 | 75.8 | 77.8 | 80.3 | 81.3 | 83.0 | 88.0 | 96.5 | 98.6 | 100.8 | 91.7 | 174.3 |
| 63 | 71.6 | 75.2 | 77.8 | 78.1 | 79.1 | 82.1 | 82.8 | 84.8 | 89.1 | 99.7 | 100.9 | 91.9 | 174.9 | |
| 80 | 73.4 | 76.3 | 78.4 | 78.6 | 80.4 | 83.4 | 83.9 | 86.6 | 91.6 | 99.6 | 101.0 | 101.2 | 92.7 | 175.9 |
| 100 | 77.6 | 77.5 | 79.8 | 80.6 | 81.6 | 84.1 | 85.1 | 88.4 | 93.3 | 100.6 | 102.1 | 102.1 | 92.8 | 176.9 |
| 125 | 91.6 | 92.5 | 89.8 | 87.1 | 88.1 | 88.1 | 86.9 | 89.9 | 96.6 | 104.1 | 107.6 | 105.5 | 95.4 | 181.3 |
| 160 | 88.5 | 89.6 | 89.0 | 87.3 | 87.8 | 88.3 | 88.1 | 90.8 | 95.5 | 100.7 | 103.7 | 101.1 | 90.4 | 177.8 |
| 200 | 92.6 | 91.8 | 92.5 | 91.3 | 88.0 | 87.8 | 88.0 | 91.0 | 96.0 | 99.9 | 101.7 | 97.8 | 87.0 | 176.5 |
| 250 | 88.9 | 90.3 | 92.5 | 93.8 | 94.1 | 92.1 | 88.4 | 91.3 | 97.3 | 100.9 | 100.2 | 95.9 | 83.9 | 176.4 |
| 315 | 86.6 | 89.1 | 90.3 | 91.7 | 94.0 | 94.5 | 91.5 | 92.2 | 96.3 | 101.2 | 99.1 | 94.5 | 81.9 | 176.3 |
| 400 | 85.8 | 88.2 | 89.5 | 89.6 | 91.4 | 93.7 | 93.9 | 93.1 | 96.7 | 100.3 | 97.4 | 92.3 | 79.4 | 175.8 |
| 500 | 84.6 | 86.4 | 89.0 | 88.9 | 89.5 | 91.0 | 93.4 | 93.6 | 95.7 | 98.8 | 95.5 | 89.9 | 76.5 | 174.8 |
| 630 | 83.0 | 85.9 | 87.8 | 88.7 | 90.1 | 91.6 | 91.6 | 94.5 | 94.8 | 97.8 | 93.9 | 88.2 | 74.8 | 174.5 |
| 800 | 80.9 | 84.4 | 87.4 | 88.3 | 89.4 | 90.9 | 91.2 | 93.6 | 93.8 | 96.0 | 92.2 | 86.1 | 73.5 | 173.8 |
| 1000 | 80.0 | 83.5 | 85.7 | 87.3 | 89.2 | 90.2 | 89.9 | 92.4 | 93.4 | 94.9 | 90.4 | 84.0 | 70.5 | 173.3 |
| 1250 | 77.8 | 81.5 | 85.5 | 86.1 | 88.6 | 90.7 | 88.9 | 91.6 | 92.6 | 93.8 | 88.7 | 82.8 | 68.0 | 173.2 |
| 1600 | 73.7 | 79.1 | 82.3 | 84.2 | 87.1 | 88.7 | 87.4 | 89.2 | 89.7 | 90.9 | 85.6 | 79.2 | 64.7 | 171.9 |
| 2000 | 70.8 | 77.0 | 80.9 | 83.1 | 86.2 | 87.9 | 85.9 | 87.6 | 87.5 | 89.9 | 82.5 | 76.0 | 60.4 | 172.1 |
| 2500 | 64.2 | 73.5 | 76.7 | 80.1 | 83.8 | 85.4 | 82.8 | 84.2 | 85.1 | 85.8 | 79.2 | 69.8 | 53.8 | 171.5 |
| 3150 | 59.8 | 67.7 | 72.4 | 74.3 | 80.2 | 81.6 | 78.1 | 78.1 | 81.0 | 79.9 | 72.4 | 61.1 | 42.8 | 170.8 |
| 4000 | 52.0 | 59.3 | 66.3 | 69.9 | 72.0 | 73.3 | 71.9 | 72.6 | 73.9 | 73.6 | 62.5 | 48.5 | 21.8 | 170.9 |
| 5000 | 38.0 | 47.2 | 55.5 | 59.6 | 65.8 | 66.9 | 62.3 | 63.1 | 64.0 | 62.7 | 48.6 | 29.3 | 171.5 | |
| 6300 | 12.3 | 28.5 | 37.0 | 43.8 | 48.0 | 50.9 | 48.7 | 46.6 | 48.8 | 43.6 | 26.3 | 1.7 | 171.1 | |
| 8000 | | | 10.1 | 18.6 | 22.3 | 25.2 | 25.5 | 23.0 | 23.3 | 13.0 | | | 173.5 | |
| 10000 | | | | | | | | | | | | | | |

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OASPL 98.1 99.3 100.2 100.5 101.6 102.4 101.8 103.5 106.7 111.5 112.4 110.7 100.9 188.8
 PNL 101.5 103.7 105.8 106.9 108.8 110.2 109.0 110.6 112.8 116.2 115.2 111.9 100.8
 PNL 103.3 105.2 106.7 107.4 110.1 111.3 109.5 110.6 113.4 116.9 115.9 112.5 101.9

DIAMETER RATIO 8.070 FREQUENCY SHIFT -9

TEST DATE 03-23-78 TAPE NO. N312 ALPHA SB59 TAMB 54.50
 LOCATION C41 ANECH CH AERO. RDG. ADH191 PAMB 29.4200 RELHJM 61.80

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
 O200 O204 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL O. M/SEC (O. FPS)

02/15/80 9.180

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X02050
BACKGROUND FJB300-FMODL X05230

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

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OF POOR QUALITY

TEST DATE 03-23-78 TAPE NO. N312 ALPHA SB59 TAMB 46.94
LOCATION C41 ANECH CH AERO. RDG. ADH200 PAMB 29.4300 RELHUM 83.10

MODEL TEST POINT 0205 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 89.92 M/SEC (295.0 FPS) SIZE FREE-JET SPEED

215

02/15/80 9.180

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X02050

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

OASPL

121.3

121.6

122.2

122.4

122.9

121.4

120.1

121.5

126.1

130.8

133.1

133.8

126.6

170.0

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 295.00 REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-23-78 TAPE NO. N312 ALPHA SB59 TAMB 46.94
 LOCATION C41 ANECH CH AERO. RDG. ADH200 PAMB 29.4300 RELHUM 83.10

MODEL TEST POINT 0200 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 89.92 M/SEC (295.0 FPS)
 FREE-JET SPEED

02/15/80 9.180

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X02051

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|-------|------|------|------|------|-------|-------|-------|------|-------|
| 50 | 72.3 | 74.5 | 75.3 | 75.9 | 77.3 | 78.9 | 79.4 | 80.8 | 86.3 | 95.3 | 97.3 | 98.6 | 89.2 | 172.5 |
| 63 | 74.6 | 76.1 | 77.0 | 78.3 | 78.4 | 80.0 | 80.0 | 81.5 | 88.7 | 96.5 | 98.7 | 99.4 | 89.4 | 173.5 |
| 80 | 75.1 | 76.6 | 78.6 | 78.9 | 80.3 | 81.1 | 81.5 | 84.0 | 93.7 | 100.2 | 104.4 | 103.7 | 90.7 | 178.1 |
| 100 | 76.2 | 77.8 | 79.4 | 82.8 | 85.6 | 83.1 | 83.2 | 86.5 | 94.8 | 100.9 | 104.7 | 104.2 | 91.3 | 178.7 |
| 125 | 85.6 | 88.2 | 90.9 | 83.3 | 85.5 | 83.7 | 84.0 | 86.9 | 92.0 | 97.8 | 101.0 | 98.5 | 87.4 | 174.8 |
| 160 | 86.9 | 86.9 | 89.9 | 87.0 | 84.8 | 85.5 | 84.2 | 86.8 | 93.3 | 97.3 | 101.3 | 97.3 | 87.4 | 174.8 |
| 200 | 90.1 | 92.0 | 90.1 | 96.9 | 97.6 | 89.6 | 86.0 | 87.8 | 94.4 | 98.8 | 99.5 | 95.3 | 85.3 | 175.5 |
| 250 | 90.4 | 93.0 | 95.3 | 98.7 | 100.0 | 93.6 | 88.0 | 88.7 | 94.7 | 99.8 | 98.1 | 93.9 | 83.9 | 176.4 |
| 315 | 90.4 | 91.8 | 94.2 | 90.1 | 90.9 | 94.1 | 92.7 | 89.4 | 95.6 | 98.9 | 96.4 | 92.3 | 82.1 | 174.9 |
| 400 | 88.0 | 90.1 | 91.0 | 91.0 | 90.2 | 91.5 | 92.2 | 90.8 | 95.2 | 98.2 | 95.0 | 89.7 | 79.7 | 174.2 |
| 500 | 86.0 | 88.7 | 90.1 | 89.6 | 89.9 | 90.3 | 90.7 | 92.1 | 94.9 | 97.2 | 94.2 | 88.4 | 78.4 | 173.8 |
| 630 | 85.3 | 87.2 | 89.0 | 89.4 | 89.4 | 91.3 | 90.2 | 92.6 | 94.7 | 96.3 | 93.1 | 86.8 | 77.1 | 173.7 |
| 800 | 85.0 | 86.9 | 89.0 | 89.3 | 90.1 | 91.1 | 91.1 | 92.2 | 95.1 | 95.6 | 91.1 | 84.6 | 74.9 | 173.7 |
| 1000 | 83.6 | 86.5 | 89.2 | 89.0 | 90.0 | 91.2 | 90.4 | 92.1 | 93.7 | 94.9 | 90.1 | 83.2 | 72.7 | 173.7 |
| 1250 | 82.4 | 85.7 | 88.0 | 88.0 | 90.1 | 91.8 | 89.4 | 90.8 | 91.2 | 92.6 | 87.6 | 80.4 | 69.8 | 173.0 |
| 1600 | 79.7 | 83.4 | 86.9 | 86.7 | 88.3 | 88.3 | 89.8 | 87.5 | 88.2 | 92.1 | 84.9 | 78.0 | 66.6 | 172.8 |
| 2000 | 75.8 | 80.4 | 83.6 | 86.4 | 88.2 | 88.9 | 86.4 | 87.5 | 88.5 | 81.7 | 74.6 | 62.0 | 62.0 | 172.5 |
| 2500 | 73.3 | 78.9 | 82.7 | 83.0 | 86.5 | 87.0 | 83.0 | 83.7 | 85.9 | 84.1 | 76.5 | 58.4 | 56.0 | 172.2 |
| 3150 | 64.4 | 73.1 | 76.8 | 77.4 | 82.3 | 82.7 | 78.3 | 77.6 | 81.6 | 81.2 | 70.9 | 59.1 | 43.3 | 171.9 |
| 4000 | 56.5 | 64.7 | 68.5 | 72.3 | 73.6 | 74.4 | 72.0 | 72.0 | 74.6 | 73.4 | 62.3 | 46.5 | 25.7 | 171.5 |
| 5000 | 42.1 | 50.7 | 59.1 | 62.5 | 67.7 | 67.6 | 62.5 | 62.5 | 64.8 | 60.8 | 47.4 | 28.1 | | 171.6 |
| 6300 | 21.1 | 32.5 | 42.7 | 46.2 | 49.7 | 50.6 | 47.6 | 45.1 | 50.0 | 41.7 | 25.0 | | | 171.1 |
| 8000 | | 2.0 | 13.4 | 20.1 | 24.0 | 25.4 | 24.9 | 21.3 | 24.9 | 14.9 | | | | 172.6 |
| 10000 | | | | | | | | | | | | | | 170.6 |

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OASPL 98.1 100.2 102.0 103.2 104.2 102.4 100.9 101.7 105.8 109.7 111.1 109.5 98.0 188.0
 PNLT 103.3 105.9 108.3 109.8 111.2 110.7 108.5 109.5 112.3 114.7 113.0 109.9 98.3
 PNLT 104.0 106.9 109.3 111.4 113.0 111.9 108.5 109.5 112.8 114.7 113.0 110.4 98.3

DIAMETER RATIO 8.070 FREQUENCY SHIFT -9

TEST DATE 03-23-78 TAPE NO. N312 TAMB 46.94
 LOCATION C41 ANECH CH AERO. RDG. ADH200 PAMB 29.4300 RELHUM 83.10

MODEL TEST POINT ACQUSTIC RANGE SIZE FREE-JET SPEED
 O200 0205 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 89.92 M/SEC (295.0 FPS)

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X02060
BACKGROUND FJB400-FMODL X05220

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50
63
80

100
125
160

250 86.5 90.0 89.8 90.8 91.2 93.3 95.7 98.4 100.8 107.6 112.8 119.0 116.4 150.6
315 88.1 89.6 90.2 90.4 92.8 95.2 95.8 98.7 102.4 110.7 115.1 120.6 115.7 152.1
400 90.1 90.4 91.4 91.2 92.8 95.2 96.6 99.2 104.2 114.5 118.2 121.8 114.5 153.8
500 89.9 91.5 93.0 92.6 94.1 96.0 97.9 100.3 105.5 116.1 120.0 121.7 111.8 154.5
630 91.5 92.9 94.9 94.4 95.7 97.6 99.0 102.7 107.9 117.5 121.3 121.3 109.2 155.2
800 104.6 106.1 106.4 97.4 103.5 100.6 101.3 106.7 112.4 123.5 128.1 123.8 109.2 160.7
1000 104.4 102.2 101.5 99.0 98.8 100.7 101.6 105.3 111.5 119.0 122.4 117.9 105.8 155.6
1250 107.3 108.3 107.6 103.8 101.7 102.3 102.9 106.1 111.8 118.4 122.0 116.4 104.9 155.3
1600 108.6 110.4 114.2 118.0 116.0 107.4 104.8 107.5 112.9 118.7 122.2 115.7 105.5 157.4
2000 105.0 106.0 107.5 109.5 111.1 111.0 106.3 108.5 114.2 119.8 121.5 115.0 104.8 156.2
2500 105.3 106.8 106.6 105.6 107.2 111.6 112.5 109.6 114.3 120.9 120.6 115.1 104.9 156.4
3150 104.3 105.3 107.3 107.9 106.9 108.3 110.9 111.9 115.8 120.7 118.9 114.8 104.8 156.0
4000 104.6 104.9 106.6 105.9 107.0 107.4 109.5 112.7 115.6 119.7 118.2 113.4 103.6 155.4
5000 104.0 104.5 105.8 106.3 106.1 108.5 109.4 113.5 115.3 119.4 117.3 112.5 102.5 155.2
6300 103.1 104.1 105.9 105.9 106.9 107.8 109.2 112.9 115.0 118.0 115.8 111.2 102.4 154.5
8000 102.6 104.0 104.9 105.5 106.3 108.0 108.5 112.1 114.8 116.4 115.0 110.1 100.9 154.1
10000 101.3 102.3 104.2 104.7 106.3 108.0 108.1 111.2 113.7 116.4 113.5 108.5 99.6 153.9
12500 98.4 100.4 102.3 103.1 105.1 106.2 105.9 109.3 111.4 114.2 111.5 105.9 97.4 152.7
16000 97.1 98.6 101.0 102.4 104.8 106.2 104.5 107.7 110.3 113.2 108.5 104.3 96.8 152.8
20000 92.2 96.2 98.0 99.4 103.3 104.4 102.3 105.0 107.7 109.7 105.9 101.9 94.3 151.8
25000 90.3 93.6 95.1 95.4 100.3 101.4 99.0 100.4 105.7 106.2 102.1 97.4 92.6 151.0
31500 88.5 89.0 92.7 94.2 95.0 95.9 95.4 98.2 102.2 105.3 99.4 93.3 88.2 151.4
40000 83.9 84.1 87.8 89.5 93.2 94.1 90.7 93.8 98.5 100.6 95.4 88.8 84.0 151.4
50000 76.7 79.4 80.3 83.4 85.5 86.9 85.9 88.0 95.1 96.1 90.9 83.5 77.9 150.9
63000 71.7 74.1 74.4 77.4 77.9 78.4 80.8 82.0 91.8 90.2 85.5 77.5 72.8 151.3
80000 65.3 66.6 69.0 72.9 71.9 73.7 73.9 76.7 85.4 85.7 80.5 69.1 65.0 152.5

OASPL 116.0 117.1 118.8 120.4 120.1 119.5 119.7 122.1 125.6 131.2 133.2 130.7 122.3 168.8

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 46.94
LOCATION C41 ANECH CH AERO. RDG. ADH201 PAMB 29.4300 RELHUM 83.10

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
O206 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 120.70 M/SEC (396.0 FPS)

ORIGINAL PAGE IS
OF POOR QUALITY

02/15/80 9.180

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS

IDENTIFICATION - FJ-400-FMODL X02060

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

ORIGINAL PAGE IS
OF POOR QUALITY

| FREQ | 50 | 63 | 80 | 100 | 125 | 160 | 200 | 250 | 315 | 400 | 500 | 630 | 800 | 1000 | 1250 | 1600 | 2000 | 2500 | 3150 | 4000 | 5000 | 6300 | 8000 | 10000 | 12500 | 16000 | 20000 | 25000 | 31500 | 40000 | 50000 | 63000 | 80000 | ASPL | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|--|--|
| | 93.6 | 95.9 | 94.4 | 93.9 | 92.7 | 93.3 | 93.8 | 94.8 | 99.0 | 106.4 | 110.3 | 116.2 | 113.1 | 148.0 | | | | | | | | | | | | | | | | | | | | | | |
| | 93.6 | 95.9 | 94.3 | 93.9 | 94.6 | 95.4 | 94.4 | 95.9 | 102.1 | 111.7 | 114.9 | 119.4 | 114.6 | 151.4 | | | | | | | | | | | | | | | | | | | | | | |
| | 400 | 95.7 | 96.0 | 93.8 | 94.5 | 95.4 | 95.8 | 97.4 | 104.0 | 114.1 | 118.1 | 121.2 | 114.8 | 153.5 | | | | | | | | | | | | | | | | | | | | | | |
| | 500 | 96.8 | 96.1 | 95.9 | 94.4 | 96.0 | 96.3 | 97.2 | 98.6 | 105.2 | 115.5 | 119.6 | 121.7 | 154.4 | | | | | | | | | | | | | | | | | | | | | | |
| | 630 | 97.3 | 97.7 | 97.9 | 95.9 | 97.7 | 98.0 | 98.2 | 100.7 | 121.4 | 126.4 | 124.9 | 116.5 | 159.6 | | | | | | | | | | | | | | | | | | | | | | |
| | 800 | 99.1 | 99.2 | 98.8 | 97.9 | 101.1 | 100.4 | 104.5 | 110.4 | 117.8 | 121.8 | 120.7 | 116.0 | 155.7 | | | | | | | | | | | | | | | | | | | | | | |
| | 1000 | 114.7 | 114.5 | 112.8 | 101.7 | 100.5 | 101.3 | 100.9 | 103.3 | 110.8 | 117.2 | 121.5 | 119.3 | 156.1 | | | | | | | | | | | | | | | | | | | | | | |
| | 1250 | 111.6 | 108.1 | 106.0 | 102.0 | 103.5 | 103.1 | 102.3 | 104.3 | 112.1 | 117.7 | 121.9 | 118.8 | 155.8 | | | | | | | | | | | | | | | | | | | | | | |
| | 1600 | 114.3 | 114.2 | 112.1 | 106.9 | 118.5 | 108.4 | 104.4 | 105.8 | 113.6 | 118.9 | 121.3 | 118.2 | 157.4 | | | | | | | | | | | | | | | | | | | | | | |
| | 2000 | 116.1 | 116.9 | 119.4 | 121.8 | 113.7 | 112.2 | 106.2 | 107.1 | 114.1 | 120.4 | 120.7 | 118.6 | 159.5 | | | | | | | | | | | | | | | | | | | | | | |
| | 2500 | 112.5 | 112.4 | 112.7 | 113.5 | 110.1 | 113.1 | 112.6 | 108.5 | 116.1 | 120.7 | 119.6 | 119.0 | 157.6 | | | | | | | | | | | | | | | | | | | | | | |
| | 3150 | 112.9 | 113.4 | 112.0 | 109.7 | 110.1 | 110.3 | 111.6 | 111.2 | 116.4 | 120.2 | 119.1 | 117.6 | 157.1 | | | | | | | | | | | | | | | | | | | | | | |
| | 4000 | 111.5 | 111.7 | 112.7 | 112.1 | 110.6 | 109.9 | 110.6 | 112.6 | 116.1 | 119.8 | 118.1 | 116.5 | 156.7 | | | | | | | | | | | | | | | | | | | | | | |
| | 5000 | 111.5 | 111.2 | 112.1 | 110.4 | 110.1 | 111.5 | 110.8 | 113.6 | 116.0 | 118.6 | 116.9 | 115.4 | 156.3 | | | | | | | | | | | | | | | | | | | | | | |
| | 6300 | 111.3 | 111.2 | 111.6 | 111.1 | 110.9 | 110.8 | 110.7 | 113.0 | 115.9 | 117.1 | 116.1 | 114.4 | 156.0 | | | | | | | | | | | | | | | | | | | | | | |
| | 8000 | 110.3 | 110.6 | 111.5 | 110.6 | 110.3 | 111.0 | 110.0 | 112.2 | 114.9 | 117.0 | 114.5 | 112.5 | 155.6 | | | | | | | | | | | | | | | | | | | | | | |
| | 10000 | 109.7 | 110.3 | 110.3 | 110.0 | 110.3 | 111.0 | 109.6 | 111.2 | 112.9 | 115.1 | 112.7 | 110.2 | 155.0 | | | | | | | | | | | | | | | | | | | | | | |
| | 12500 | 108.1 | 108.3 | 109.3 | 109.0 | 109.1 | 109.2 | 107.4 | 109.3 | 112.5 | 114.9 | 110.6 | 109.5 | 154.7 | | | | | | | | | | | | | | | | | | | | | | |
| | 16000 | 104.6 | 106.0 | 107.0 | 106.8 | 109.4 | 109.2 | 106.2 | 107.9 | 110.6 | 112.2 | 108.9 | 108.2 | 154.4 | | | | | | | | | | | | | | | | | | | | | | |
| | 20000 | 105.7 | 106.0 | 106.9 | 106.8 | 107.9 | 107.4 | 104.3 | 105.6 | 109.5 | 109.7 | 106.2 | 104.9 | 154.7 | | | | | | | | | | | | | | | | | | | | | | |
| | 25000 | 100.2 | 103.0 | 103.4 | 103.2 | 104.9 | 104.4 | 101.1 | 101.2 | 106.0 | 108.6 | 103.0 | 99.9 | 153.9 | | | | | | | | | | | | | | | | | | | | | | |
| | 31500 | 97.5 | 99.5 | 99.7 | 98.4 | 99.0 | 98.9 | 97.0 | 98.3 | 103.2 | 104.8 | 100.0 | 96.3 | 153.2 | | | | | | | | | | | | | | | | | | | | | | |
| | 40000 | 92.1 | 91.9 | 94.7 | 95.2 | 97.8 | 97.1 | 92.4 | 93.9 | 100.2 | 100.7 | 95.7 | 91.3 | 153.5 | | | | | | | | | | | | | | | | | | | | | | |
| | 50000 | 89.9 | 88.9 | 91.1 | 91.3 | 90.1 | 89.9 | 87.6 | 88.1 | 97.9 | 95.8 | 91.4 | 86.4 | 153.5 | | | | | | | | | | | | | | | | | | | | | | |
| | 63000 | 81.7 | 83.2 | 82.7 | 84.2 | 81.9 | 81.4 | 82.5 | 82.3 | 92.9 | 92.7 | 87.9 | 79.4 | 153.6 | | | | | | | | | | | | | | | | | | | | | | |
| | 80000 | 72.5 | 74.2 | 73.6 | 75.6 | 76.5 | 76.7 | 75.5 | 76.9 | 83.1 | 82.9 | 78.0 | 69.6 | 151.5 | | | | | | | | | | | | | | | | | | | | | | |
| | | 123.6 | 123.7 | 124.1 | 124.4 | 123.2 | 121.7 | 120.6 | 121.8 | 126.1 | 130.7 | 132.4 | 131.5 | 127.2 | 169.7 | | | | | | | | | | | | | | | | | | | | | |

| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|-----------------------------|
| INPUT 1 000 CALC. 1 000 | FREE JET DIAMETER (IN) | TURBULANCE CORRECTION - YES |
| | 48.00 | |

| TEST DATE | 03-23-78 | TAPE NO. | N312 | IALPHA | SB59 | TAMB | 46.94 |
|-----------|-----------|----------|------------|--------|---------|--------|-------|
| LOCATION | C41 ANECH | CH | AERO. RDG. | PAMB | 29.4300 | RELHUM | 83.10 |

| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
|-------|------------|------------------|---------------------------|--------------------------|
| 0200 | 0205 | 12.2 M (40.0 FT) | 138.7 SO CM (21.49 SO IN) | 120.70 M/SEC (396.0 FPS) |

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X02061

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | 74.4 | 76.2 | 76.3 | 75.8 | 76.9 | 78.0 | 78.2 | 79.4 | 85.3 | 94.4 | 96.8 | 97.7 | 88.0 | 171.6 |
| 63 | 75.5 | 76.3 | 77.2 | 76.4 | 78.4 | 78.9 | 79.6 | 80.6 | 87.5 | 95.7 | 98.3 | 98.1 | 87.3 | 172.5 |
| 80 | 75.9 | 77.9 | 79.1 | 77.9 | 80.1 | 80.5 | 80.5 | 82.7 | 91.9 | 101.5 | 105.1 | 101.3 | 89.6 | 177.7 |
| 100 | 77.6 | 79.3 | 81.0 | 79.8 | 88.1 | 83.6 | 82.7 | 86.4 | 91.6 | 97.9 | 100.4 | 97.0 | 88.8 | 173.9 |
| 125 | 93.2 | 94.5 | 93.9 | 83.6 | 82.8 | 83.7 | 83.1 | 85.2 | 91.9 | 97.2 | 99.9 | 95.5 | 87.8 | 174.3 |
| 160 | 89.8 | 87.9 | 86.9 | 83.7 | 85.6 | 85.4 | 84.5 | 86.0 | 93.1 | 97.6 | 100.1 | 94.7 | 88.3 | 173.9 |
| 200 | 92.3 | 93.8 | 92.8 | 88.5 | 100.5 | 90.5 | 86.4 | 87.4 | 94.4 | 98.6 | 99.2 | 93.7 | 87.2 | 175.6 |
| 250 | 93.8 | 96.2 | 99.9 | 103.1 | 95.5 | 94.1 | 88.0 | 88.4 | 94.6 | 99.8 | 98.4 | 93.8 | 87.0 | 177.7 |
| 315 | 89.8 | 91.5 | 93.0 | 94.5 | 91.6 | 94.8 | 94.1 | 89.6 | 96.3 | 99.7 | 96.8 | 93.6 | 86.9 | 175.7 |
| 400 | 89.6 | 92.0 | 91.9 | 90.5 | 91.3 | 91.7 | 92.8 | 92.0 | 96.3 | 98.8 | 95.9 | 91.5 | 84.6 | 175.2 |
| 500 | 87.8 | 90.0 | 92.3 | 92.6 | 91.5 | 91.0 | 91.6 | 93.0 | 95.7 | 98.0 | 94.4 | 89.7 | 82.0 | 174.9 |
| 630 | 87.3 | 89.0 | 91.3 | 90.5 | 90.8 | 92.3 | 91.5 | 93.8 | 95.2 | 96.4 | 92.6 | 88.0 | 81.2 | 174.5 |
| 800 | 86.6 | 88.6 | 90.5 | 91.0 | 91.4 | 91.4 | 91.1 | 92.9 | 94.8 | 94.6 | 91.3 | 86.3 | 78.6 | 174.1 |
| 1000 | 85.1 | 87.8 | 90.3 | 90.3 | 90.6 | 91.4 | 90.2 | 91.9 | 93.6 | 94.2 | 89.3 | 83.7 | 75.5 | 173.8 |
| 1250 | 84.0 | 87.2 | 88.8 | 89.5 | 90.5 | 91.3 | 89.7 | 90.7 | 91.3 | 91.9 | 87.1 | 80.6 | 72.0 | 173.1 |
| 1600 | 81.6 | 84.6 | 87.4 | 88.2 | 89.0 | 89.3 | 87.2 | 88.5 | 90.5 | 91.1 | 84.1 | 78.6 | 70.4 | 172.8 |
| 2000 | 77.1 | 81.6 | 84.6 | 85.7 | 89.0 | 89.2 | 85.9 | 86.9 | 88.3 | 87.8 | 81.4 | 75.6 | 66.3 | 172.6 |
| 2500 | 76.4 | 80.4 | 83.7 | 85.1 | 87.0 | 86.8 | 83.4 | 83.9 | 86.3 | 84.1 | 76.9 | 69.5 | 60.9 | 172.9 |
| 3150 | 67.5 | 75.0 | 78.3 | 80.0 | 82.6 | 82.5 | 78.9 | 78.0 | 81.0 | 80.5 | 70.4 | 59.6 | 46.6 | 172.1 |
| 4000 | 58.6 | 66.8 | 70.7 | 71.8 | 73.8 | 74.1 | 71.8 | 71.7 | 74.3 | 72.0 | 61.1 | 47.0 | 28.7 | 171.3 |
| 5000 | 43.4 | 51.6 | 59.6 | 63.3 | 67.5 | 67.4 | 62.2 | 62.0 | 65.0 | 60.4 | 47.1 | 28.3 | 1.1 | 171.6 |
| 6300 | 23.4 | 34.4 | 43.9 | 48.5 | 49.7 | 50.3 | 47.3 | 45.4 | 50.7 | 41.3 | 24.9 | | 171.7 | |
| 8000 | 3.8 | 14.1 | 22.2 | 23.5 | 24.1 | 24.1 | 20.3 | 24.4 | 13.3 | | | | 169.7 | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |
| OASPL | 103.6 | 102.4 | 104.1 | 105.2 | 104.4 | 102.7 | 101.4 | 102.0 | 105.8 | 109.6 | 110.3 | 106.8 | 98.0 | 187.8 |
| PNL | 105.5 | 108.1 | 110.7 | 112.0 | 111.3 | 110.8 | 108.6 | 109.3 | 112.4 | 114.7 | 112.3 | 107.9 | 100.1 | |
| PNLT | 107.1 | 109.9 | 112.3 | 113.9 | 112.8 | 112.0 | 109.2 | 109.3 | 113.0 | 114.7 | 112.3 | 107.9 | 101.2 | |

DIAMETER RATIO 8.070 FREQUENCY SHIFT -9

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 46.94
LOCATION C41 ANECH CH AERO. RDG. ADH201 PAMB 29.4300 RELHUM 83.10

MODEL TEST POINT 0206 ACOUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 120.70 M/SEC (396.0 FPS) FREE-JET SPEED

ORIGINAL PAGE IS
OF POOR QUALITY

02/15/80 9.180

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZERRFMDL X02070
BACKGROUND 0000000000 000000

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250 85.5 90.8 89.8 89.9 90.2 93.3 95.5 97.4 99.8 106.4 110.8 117.5 114.6 149.0
315 86.9 89.9 89.7 90.2 92.8 94.9 95.6 97.2 101.7 108.5 112.9 119.1 115.2 150.6
400 88.9 90.4 91.7 91.0 92.6 95.0 96.1 98.0 103.2 112.8 116.2 120.8 115.3 152.6
500 89.5 92.0 92.8 93.4 96.5 97.4 99.1 104.5 114.4 117.7 121.2 116.1 153.5
630 91.3 92.9 94.1 93.7 95.5 97.6 98.8 101.4 106.4 115.2 118.3 122.0 117.2 154.4
800 94.6 93.9 95.4 95.9 96.5 99.1 99.8 102.9 108.7 115.5 119.4 122.8 117.7 155.2
1000 98.9 99.2 99.2 98.0 97.9 100.2 101.1 104.5 110.0 115.5 118.9 122.6 118.0 155.2
1250 96.8 100.0 100.8 100.9 101.7 102.8 103.2 105.6 111.6 116.1 121.5 124.7 118.4 157.0
1600 97.8 97.9 98.2 98.7 100.1 102.4 103.1 106.2 112.4 116.3 121.0 124.0 117.2 156.5
2000 99.0 100.5 100.2 99.3 99.1 101.2 103.3 106.8 112.7 117.3 120.3 121.8 114.0 155.5
2500 98.8 99.8 100.1 100.4 100.7 102.1 104.0 107.1 112.8 119.2 119.9 112.1 155.1
3150 101.3 101.6 100.1 100.2 102.8 102.8 104.5 108.1 113.1 117.9 119.1 118.1 110.4 154.4
4000 100.1 100.6 101.7 100.8 102.6 104.3 107.7 112.2 116.8 117.5 116.4 109.7 153.3
5000 98.0 99.6 100.6 101.3 102.2 103.8 104.9 107.8 111.3 116.2 116.6 115.5 108.5 152.8
6300 96.6 98.9 100.5 100.5 102.0 104.1 105.0 108.0 110.8 115.3 114.4 114.5 108.4 152.0
8000 95.4 99.1 99.7 100.3 101.6 103.8 104.3 106.9 110.2 114.0 114.0 112.5 107.5 151.4
10000 93.4 98.1 99.8 99.6 101.7 103.8 104.2 106.8 109.3 113.0 112.6 112.1 106.2 151.1
12500 90.5 95.6 97.4 98.5 100.5 102.6 102.6 105.2 107.6 111.1 110.9 109.6 104.5 150.1
16000 88.3 93.8 96.2 97.9 100.2 102.2 100.9 103.6 105.8 110.7 109.0 108.5 102.7 150.3
20000 83.4 91.5 93.3 95.2 99.1 100.9 98.3 101.5 104.0 107.3 105.7 104.8 100.8 149.3
25000 82.0 88.6 90.4 91.4 96.0 97.1 95.0 96.4 101.5 103.3 102.6 101.8 98.6 148.3
31500 81.2 84.8 88.0 90.2 91.0 91.4 93.4 98.3 102.6 100.0 97.3 92.2 148.7
40000 77.6 79.7 83.6 85.0 89.4 90.3 87.0 88.8 94.6 98.9 97.0 92.0 89.0 149.2
50000 73.4 74.4 76.3 78.6 81.2 82.8 81.9 82.2 90.6 94.9 92.1 88.2 83.6 148.8
63000 70.6 69.8 70.4 72.3 73.1 74.9 76.2 76.0 87.1 90.0 86.5 83.2 78.5 149.2
80000 70.0 63.1 64.1 67.6 66.9 69.4 68.3 70.7 82.1 85.6 82.0 76.1 71.5 151.2

OASPL 109.2 110.8 111.4 111.5 112.7 114.7 115.4 118.4 122.9 128.1 130.5 132.8 127.2 167.1

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 51.44
LOCATION C41 ANECH CH AERO. RDG. ADH195 PAMS 29.4600 RELHUM 67.90

MODEL TEST POINT 0207 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (O. FPS)

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZERRFMDL X02070

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 85.5 | 90.8 | 89.8 | 89.9 | 90.2 | 93.3 | 95.5 | 97.4 | 99.8 | 106.4 | 110.8 | 117.5 | 114.6 | 149.0 |
| 315 | 86.9 | 89.9 | 89.7 | 90.2 | 92.8 | 94.9 | 95.6 | 97.2 | 101.7 | 108.5 | 112.9 | 119.1 | 115.2 | 150.6 |
| 400 | 88.9 | 90.4 | 91.7 | 91.0 | 92.6 | 95.0 | 96.1 | 98.0 | 103.2 | 112.8 | 116.2 | 120.8 | 115.3 | 152.6 |
| 500 | 89.5 | 92.0 | 92.8 | 93.3 | 93.4 | 96.5 | 97.4 | 99.1 | 104.5 | 114.4 | 117.7 | 121.2 | 116.1 | 153.5 |
| 630 | 91.3 | 92.9 | 94.1 | 93.7 | 95.5 | 97.6 | 98.8 | 101.4 | 106.4 | 115.2 | 118.3 | 122.0 | 117.2 | 154.4 |
| 800 | 94.6 | 93.9 | 95.4 | 95.9 | 96.5 | 99.1 | 99.8 | 102.9 | 108.7 | 115.5 | 119.4 | 122.8 | 117.7 | 155.2 |
| 1000 | 98.9 | 99.2 | 99.2 | 98.0 | 97.9 | 100.2 | 101.1 | 104.5 | 110.0 | 115.5 | 118.9 | 122.6 | 118.0 | 155.2 |
| 1250 | 96.8 | 100.0 | 100.8 | 100.9 | 101.7 | 102.8 | 103.2 | 105.6 | 111.6 | 116.1 | 121.5 | 124.7 | 118.4 | 157.0 |
| 1600 | 97.8 | 97.9 | 98.2 | 98.7 | 100.1 | 102.4 | 103.1 | 106.2 | 112.4 | 116.3 | 121.0 | 124.0 | 117.2 | 156.5 |
| 2000 | 99.0 | 100.5 | 100.2 | 99.3 | 99.1 | 101.2 | 103.3 | 106.8 | 112.7 | 117.3 | 120.3 | 121.8 | 114.0 | 155.5 |
| 2500 | 98.8 | 99.8 | 100.1 | 100.4 | 100.7 | 102.1 | 104.0 | 107.1 | 112.8 | 119.2 | 119.9 | 119.1 | 112.1 | 155.1 |
| 3150 | 101.3 | 101.6 | 100.1 | 100.1 | 100.2 | 102.8 | 104.5 | 108.1 | 113.1 | 117.9 | 119.1 | 118.1 | 110.4 | 154.4 |
| 4000 | 100.1 | 100.6 | 101.7 | 100.7 | 100.8 | 102.6 | 104.3 | 107.7 | 112.2 | 116.8 | 117.5 | 116.4 | 109.7 | 153.3 |
| 5000 | 98.0 | 99.6 | 100.6 | 101.3 | 102.2 | 103.8 | 104.9 | 107.8 | 111.3 | 116.2 | 116.6 | 115.5 | 108.5 | 152.8 |
| 6300 | 96.6 | 98.9 | 100.5 | 100.5 | 102.0 | 104.1 | 105.0 | 108.0 | 110.8 | 115.3 | 114.4 | 114.5 | 108.4 | 152.0 |
| 8000 | 95.4 | 99.1 | 99.7 | 100.3 | 101.6 | 103.8 | 104.3 | 106.9 | 110.2 | 114.0 | 114.0 | 112.5 | 107.5 | 151.4 |
| 10000 | 93.4 | 98.1 | 99.8 | 99.6 | 101.7 | 103.8 | 104.2 | 106.8 | 109.3 | 113.0 | 112.6 | 112.1 | 106.2 | 151.1 |
| 12500 | 90.5 | 95.6 | 97.4 | 98.5 | 100.5 | 102.6 | 102.6 | 105.2 | 107.6 | 111.1 | 110.9 | 109.6 | 104.5 | 150.1 |
| 16000 | 88.3 | 93.8 | 96.2 | 97.9 | 100.2 | 102.2 | 100.9 | 103.6 | 105.8 | 110.7 | 109.0 | 108.5 | 102.7 | 150.3 |
| 20000 | 83.4 | 91.5 | 93.3 | 95.2 | 99.1 | 100.9 | 98.3 | 101.5 | 104.0 | 107.3 | 105.7 | 104.8 | 100.8 | 149.3 |
| 25000 | 82.0 | 88.6 | 90.4 | 91.4 | 96.0 | 97.1 | 95.0 | 96.4 | 101.5 | 103.3 | 102.6 | 101.8 | 98.6 | 148.3 |
| 31500 | 81.2 | 84.8 | 88.0 | 90.2 | 91.0 | 91.4 | 91.4 | 93.4 | 98.3 | 102.6 | 100.0 | 97.3 | 92.2 | 148.7 |
| 40000 | 77.6 | 79.7 | 83.6 | 85.0 | 89.4 | 90.3 | 87.0 | 88.8 | 94.6 | 98.9 | 97.0 | 92.0 | 89.0 | 149.2 |
| 50000 | 73.4 | 74.4 | 76.3 | 78.6 | 81.2 | 82.8 | 81.9 | 82.2 | 90.6 | 94.9 | 92.1 | 88.2 | 83.6 | 148.8 |
| 63000 | 70.6 | 69.8 | 70.4 | 72.3 | 73.1 | 74.9 | 76.2 | 76.0 | 87.1 | 90.0 | 86.5 | 83.2 | 78.5 | 149.2 |
| 80000 | 70.0 | 63.1 | 64.1 | 67.6 | 66.9 | 69.4 | 68.3 | 70.7 | 82.1 | 85.6 | 82.0 | 76.1 | 71.5 | 151.2 |
| DASPL | 109.2 | 110.8 | 111.4 | 111.5 | 112.7 | 114.7 | 115.4 | 118.4 | 122.9 | 128.1 | 130.5 | 132.8 | 127.2 | 167.1 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | O. | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|-------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | C3-23-78 | TAPE NO. | N312 | IALPHA | SB59 | TAMB | 51.44 |
|-----------|--------------|------------|--------|--------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH195 | PAMB | 29.4600 | RELHJM | 67.90 |

| MODEL | TEST POINT | ACOUSTIC RANGE | ARC | 138.7 SQ CM (21.49 SQ IN) | SIZE | FREE-JET SPEED |
|-------|------------|-------------------|-----|---|-------|--------------------|
| 0200 | 0207 | 12.2 M (40.0 FT) | ARC | 138.7 SQ CM (21.49 SQ IN) <td>MODEL</td> <td>O. M/SEC (O. FPS)</td> | MODEL | O. M/SEC (O. FPS) |

02/15/80 9.180

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FU-ZERRFMDL X02071

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|-------|------|-------|
| 50 | 67.6 | 70.7 | 73.0 | 73.0 | 75.0 | 77.5 | 78.5 | 80.0 | 84.5 | 93.0 | 94.9 | 97.3 | 88.4 | 170.8 |
| 63 | 68.1 | 72.2 | 74.1 | 74.3 | 75.8 | 79.1 | 79.8 | 81.1 | 85.8 | 94.6 | 96.4 | 97.6 | 89.2 | 171.7 |
| 80 | 69.9 | 73.0 | 75.4 | 75.6 | 77.9 | 80.1 | 81.1 | 83.4 | 87.6 | 95.4 | 97.0 | 98.4 | 90.2 | 172.5 |
| 100 | 73.1 | 74.0 | 76.6 | 77.9 | 78.9 | 81.6 | 82.1 | 84.9 | 89.8 | 95.6 | 97.9 | 99.1 | 90.5 | 173.3 |
| 125 | 77.3 | 79.2 | 80.3 | 79.9 | 80.1 | 82.6 | 83.4 | 86.4 | 91.1 | 95.6 | 97.4 | 98.7 | 90.6 | 173.3 |
| 160 | 75.0 | 79.9 | 81.8 | 82.6 | 83.8 | 85.1 | 85.3 | 87.3 | 92.5 | 96.0 | 99.7 | 100.6 | 90.6 | 175.2 |
| 200 | 75.8 | 77.5 | 79.0 | 80.3 | 82.0 | 84.5 | 85.0 | 87.8 | 93.2 | 95.9 | 99.0 | 99.5 | 89.0 | 174.6 |
| 250 | 76.6 | 79.8 | 80.8 | 80.6 | 80.9 | 83.1 | 85.1 | 88.1 | 93.3 | 96.7 | 97.9 | 96.9 | 85.1 | 173.6 |
| 315 | 76.1 | 78.9 | 80.3 | 81.4 | 82.2 | 83.7 | 85.5 | 88.2 | 93.1 | 98.2 | 97.1 | 93.7 | 82.4 | 173.3 |
| 400 | 78.1 | 80.2 | 80.0 | 80.9 | 81.4 | 84.2 | 85.7 | 88.9 | 93.0 | 96.6 | 95.9 | 92.0 | 79.7 | 172.6 |
| 500 | 76.4 | 78.9 | 81.2 | 81.1 | 81.7 | 83.7 | 85.2 | 88.1 | 91.7 | 95.0 | 93.7 | 83.7 | 78.0 | 171.4 |
| 630 | 73.8 | 77.4 | 79.8 | 81.5 | 82.8 | 84.6 | 85.6 | 88.0 | 90.6 | 94.0 | 92.4 | 88.2 | 75.8 | 170.9 |
| 800 | 71.9 | 76.4 | 79.4 | 80.3 | 82.4 | 84.7 | 85.4 | 87.8 | 89.7 | 92.8 | 89.7 | 86.4 | 74.5 | 170.1 |
| 1000 | 70.3 | 76.3 | 78.4 | 80.0 | 81.9 | 84.2 | 84.6 | 86.6 | 88.9 | 91.2 | 88.9 | 83.7 | 72.5 | 169.5 |
| 1250 | 67.7 | 75.0 | 78.2 | 79.1 | 81.8 | 84.1 | 84.3 | 86.3 | 87.8 | 89.8 | 86.9 | 82.5 | 69.7 | 169.3 |
| 1600 | 63.9 | 71.8 | 75.5 | 77.7 | 80.3 | 82.7 | 82.4 | 84.4 | 85.6 | 87.3 | 84.3 | 78.6 | 65.7 | 168.3 |
| 2000 | 60.8 | 69.5 | 73.8 | 76.8 | 79.9 | 82.1 | 80.6 | 82.6 | 83.4 | 86.3 | 81.5 | 76.0 | 60.8 | 168.5 |
| 2500 | 54.1 | 65.9 | 70.1 | 73.5 | 78.2 | 80.3 | 77.4 | 79.8 | 80.8 | 81.7 | 76.4 | 69.5 | 54.0 | 167.5 |
| 3150 | 49.4 | 60.6 | 65.3 | 68.1 | 73.8 | 75.2 | 72.7 | 73.2 | 76.4 | 75.2 | 70.0 | 61.5 | 43.4 | 166.4 |
| 4000 | 42.3 | 52.1 | 59.1 | 63.7 | 65.8 | 66.6 | 66.2 | 66.9 | 69.4 | 69.8 | 61.1 | 48.1 | 22.6 | 166.9 |
| 5000 | 29.0 | 39.4 | 48.4 | 53.0 | 59.2 | 60.6 | 56.8 | 56.8 | 59.4 | 58.6 | 48.3 | 29.0 | | 167.3 |
| 6300 | 6.9 | 19.8 | 29.1 | 35.9 | 40.9 | 43.3 | 41.6 | 39.5 | 43.4 | 40.4 | 25.6 | 1.1 | | 167.4 |
| 8000 | | | 1.9 | 10.3 | 14.6 | 17.6 | 17.8 | 14.0 | 18.5 | 10.6 | | | | 169.4 |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| OASPL | 86.2 | 89.4 | 91.2 | 92.0 | 93.5 | 95.7 | 96.4 | 98.9 | 102.8 | 107.0 | 108.0 | 108.2 | 98.8 | 185.0 |
| PNL | 91.1 | 97.4 | 99.4 | 102.0 | 104.1 | 103.6 | 105.7 | 108.8 | 112.4 | 111.4 | 110.0 | 99.2 | | |
| PNLT | 91.6 | 95.1 | 97.4 | 99.4 | 103.3 | 105.3 | 103.6 | 105.7 | 108.8 | 113.0 | 112.5 | 110.0 | 100.3 | |

DIAMETER RATIO 8.070 FREQUENCY SHIFT -9

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 51.44
 LOCATION C41 ANECH CH AERO. RDG. ADH195 PAMB 29.4600 RELHUM 67.90

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
 0200 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL O. M/SEC (O. FPS)

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X02080
BACKGROUND FJB300-FMODL X05230

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50
63
80
100
125
160
200

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| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 82.0 | 86.3 | 85.6 | 86.4 | 87.2 | 89.3 | 91.2 | 94.1 | 96.3 | 102.9 | 108.0 | 114.7 | 111.6 | 146.2 |
| 315 | 83.4 | 85.4 | 86.4 | 86.5 | 88.5 | 90.7 | 91.3 | 94.0 | 97.9 | 105.2 | 109.9 | 115.8 | 112.0 | 147.3 |
| 400 | 85.9 | 87.2 | 87.7 | 87.0 | 89.3 | 91.2 | 92.1 | 94.7 | 99.2 | 109.3 | 113.4 | 117.8 | 111.5 | 149.5 |
| 500 | 86.7 | 87.5 | 89.8 | 89.1 | 90.4 | 92.5 | 93.7 | 96.1 | 100.8 | 110.9 | 115.0 | 118.4 | 110.1 | 150.4 |
| 630 | 87.3 | 88.9 | 90.4 | 89.9 | 91.8 | 93.9 | 95.3 | 98.2 | 103.4 | 112.0 | 116.1 | 118.0 | 107.4 | 150.7 |
| 800 | 90.1 | 89.6 | 91.4 | 92.2 | 92.8 | 95.4 | 96.5 | 99.9 | 105.1 | 112.7 | 116.4 | 117.3 | 104.7 | 150.7 |
| 1000 | 91.9 | 91.0 | 93.2 | 93.0 | 93.9 | 96.7 | 98.4 | 101.5 | 107.0 | 113.0 | 115.7 | 115.4 | 102.3 | 150.1 |
| 1250 | 91.0 | 93.3 | 95.3 | 95.1 | 96.2 | 98.3 | 99.2 | 102.6 | 108.6 | 113.4 | 117.0 | 115.7 | 101.4 | 151.0 |
| 1600 | 92.6 | 91.9 | 93.7 | 94.5 | 96.5 | 98.9 | 100.3 | 103.2 | 109.4 | 114.0 | 116.7 | 114.5 | 101.2 | 150.8 |
| 2000 | 92.5 | 93.5 | 94.7 | 94.5 | 95.8 | 98.2 | 100.1 | 104.3 | 110.7 | 115.5 | 117.0 | 114.0 | 101.5 | 151.5 |
| 2500 | 94.3 | 95.1 | 95.6 | 95.9 | 97.2 | 99.3 | 101.7 | 104.9 | 110.8 | 117.9 | 118.1 | 114.9 | 103.4 | 153.0 |
| 3150 | 97.6 | 98.6 | 97.3 | 97.4 | 97.9 | 100.1 | 101.9 | 105.4 | 111.3 | 116.7 | 118.1 | 114.8 | 103.1 | 152.7 |
| 4000 | 96.6 | 98.4 | 99.9 | 98.4 | 98.0 | 99.9 | 101.7 | 105.2 | 110.4 | 115.2 | 115.4 | 112.1 | 101.6 | 151.0 |
| 5000 | 96.0 | 97.8 | 98.8 | 99.4 | 100.5 | 102.4 | 105.8 | 109.0 | 114.4 | 114.1 | 109.3 | 99.3 | 150.0 | |
| 6300 | 95.1 | 95.9 | 97.7 | 97.4 | 99.4 | 101.8 | 102.5 | 105.7 | 109.3 | 113.5 | 112.4 | 108.4 | 97.9 | 149.5 |
| 8000 | 95.1 | 96.8 | 97.1 | 97.3 | 98.6 | 100.7 | 102.3 | 105.1 | 108.8 | 112.4 | 111.2 | 106.6 | 97.4 | 148.9 |
| 10000 | 94.1 | 95.3 | 97.4 | 97.0 | 98.6 | 101.0 | 101.4 | 104.7 | 107.7 | 111.6 | 109.7 | 106.3 | 95.9 | 148.6 |
| 12500 | 91.9 | 94.2 | 96.1 | 96.8 | 98.3 | 99.5 | 100.4 | 102.8 | 106.2 | 109.7 | 107.0 | 103.7 | 94.9 | 147.6 |
| 16000 | 90.1 | 92.4 | 95.0 | 95.9 | 98.1 | 99.5 | 98.7 | 101.9 | 104.1 | 109.5 | 105.6 | 102.4 | 94.0 | 148.0 |
| 20000 | 85.0 | 90.0 | 91.6 | 93.5 | 96.6 | 97.9 | 96.4 | 98.3 | 102.0 | 105.8 | 102.8 | 99.7 | 92.3 | 146.9 |
| 25000 | 83.6 | 87.1 | 88.9 | 89.7 | 93.6 | 95.0 | 93.1 | 94.0 | 99.0 | 101.3 | 98.9 | 95.9 | 90.6 | 145.5 |
| 31500 | 82.9 | 83.6 | 86.8 | 88.3 | 89.1 | 89.5 | 89.3 | 90.8 | 95.6 | 100.2 | 97.6 | 90.9 | 85.6 | 146.1 |
| 40000 | 78.3 | 78.6 | 82.5 | 83.4 | 87.4 | 88.0 | 84.4 | 85.7 | 90.7 | 95.3 | 93.4 | 85.9 | 81.2 | 145.7 |
| 50000 | 71.7 | 73.6 | 75.5 | 77.6 | 79.2 | 81.1 | 79.4 | 80.3 | 86.3 | 89.4 | 88.3 | 80.7 | 75.3 | 144.5 |
| 63000 | 65.7 | 68.4 | 69.2 | 71.2 | 71.6 | 72.9 | 74.1 | 73.1 | 82.4 | 84.1 | 81.5 | 74.3 | 69.8 | 144.2 |
| 80000 | 59.6 | 61.0 | 63.0 | 65.7 | 65.2 | 67.8 | 65.9 | 67.6 | 76.2 | 80.8 | 76.1 | 66.2 | 61.8 | 146.1 |
| OASPL | 105.9 | 107.0 | 108.3 | 108.3 | 109.7 | 111.6 | 112.7 | 115.9 | 120.7 | 126.2 | 127.6 | 127.4 | 118.9 | 163.5 |

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 48.74
LOCATION C41 ANECH CH AERO. RDG. ADH196 PAMB 29.4500 RELHUM 78.60

MODEL TEST POINT 0208 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 90.53 M/SEC (297.0 FPS) FREE-JET SPEED

02/15/80 9.180

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X02080

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 87.6 | 90.8 | 89.0 | 88.7 | 88.4 | 89.3 | 89.8 | 91.4 | 95.2 | 101.9 | 106.1 | 112.3 | 109.8 | 144.1 |
| 315 | 87.6 | 90.8 | 89.0 | 88.9 | 89.9 | 90.8 | 90.2 | 91.8 | 97.4 | 106.8 | 110.6 | 115.6 | 111.1 | 147.3 |
| 400 | 89.9 | 90.0 | 90.0 | 89.4 | 90.6 | 91.3 | 91.4 | 93.2 | 98.4 | 109.0 | 113.0 | 117.4 | 111.5 | 149.2 |
| 500 | 91.0 | 91.5 | 91.1 | 91.6 | 91.8 | 92.7 | 93.1 | 94.7 | 102.3 | 110.6 | 114.9 | 118.3 | 111.1 | 150.4 |
| 630 | 92.2 | 92.2 | 93.4 | 92.5 | 93.2 | 94.1 | 94.7 | 96.8 | 104.2 | 111.5 | 115.5 | 118.5 | 110.4 | 150.8 |
| 800 | 92.9 | 93.5 | 94.0 | 94.8 | 94.2 | 95.7 | 95.9 | 98.5 | 106.1 | 112.1 | 115.2 | 117.4 | 109.8 | 150.5 |
| 1000 | 95.7 | 94.3 | 95.1 | 95.6 | 95.3 | 97.1 | 97.7 | 100.0 | 107.7 | 112.3 | 116.5 | 117.7 | 108.9 | 151.1 |
| 1250 | 97.2 | 95.5 | 96.8 | 97.8 | 97.8 | 98.8 | 98.6 | 101.1 | 108.6 | 112.9 | 116.1 | 116.4 | 108.8 | 150.9 |
| 1600 | 96.6 | 98.0 | 99.0 | 97.2 | 98.2 | 99.5 | 99.8 | 101.8 | 109.9 | 114.5 | 116.4 | 115.9 | 109.0 | 151.4 |
| 2000 | 98.1 | 96.6 | 97.4 | 97.3 | 97.6 | 98.9 | 99.7 | 102.9 | 110.2 | 117.1 | 117.7 | 116.9 | 111.0 | 152.8 |
| 2500 | 98.0 | 98.2 | 98.5 | 98.8 | 99.1 | 100.2 | 101.5 | 103.7 | 111.1 | 116.2 | 118.1 | 117.4 | 111.2 | 153.0 |
| 3150 | 99.8 | 99.8 | 99.4 | 99.8 | 99.8 | 101.2 | 102.0 | 104.5 | 110.5 | 115.1 | 115.7 | 115.0 | 110.1 | 151.6 |
| 4000 | 101.4 | 102.0 | 100.3 | 101.3 | 100.2 | 101.3 | 102.1 | 104.6 | 109.4 | 114.5 | 114.6 | 112.2 | 107.7 | 150.6 |
| 5000 | 100.8 | 102.2 | 103.3 | 102.3 | 102.0 | 102.3 | 103.1 | 105.5 | 110.3 | 114.3 | 113.5 | 111.9 | 106.7 | 150.7 |
| 6300 | 101.3 | 100.8 | 101.8 | 101.2 | 102.4 | 104.0 | 103.7 | 105.9 | 110.4 | 113.6 | 112.5 | 110.2 | 106.1 | 150.4 |
| 8000 | 100.3 | 100.6 | 101.7 | 101.4 | 102.0 | 103.6 | 104.1 | 105.8 | 109.4 | 112.9 | 111.2 | 109.9 | 104.7 | 150.1 |
| 10000 | 100.2 | 101.4 | 101.3 | 101.2 | 102.2 | 104.0 | 103.2 | 105.4 | 108.2 | 111.3 | 108.8 | 107.7 | 104.0 | 149.4 |
| 12500 | 98.8 | 99.7 | 101.4 | 101.1 | 102.0 | 102.5 | 102.3 | 103.6 | 106.6 | 111.6 | 107.8 | 106.9 | 103.7 | 149.5 |
| 16000 | 96.1 | 98.1 | 99.5 | 101.0 | 102.1 | 102.5 | 100.6 | 102.7 | 105.0 | 108.4 | 105.6 | 104.9 | 103.0 | 149.1 |
| 20000 | 95.9 | 97.5 | 99.3 | 98.5 | 100.7 | 100.9 | 98.2 | 99.6 | 102.9 | 104.9 | 103.0 | 102.5 | 102.8 | 148.6 |
| 25000 | 90.2 | 94.5 | 95.2 | 94.7 | 97.7 | 98.0 | 95.2 | 95.1 | 99.9 | 104.0 | 101.6 | 97.2 | 97.0 | 148.2 |
| 31500 | 88.0 | 90.9 | 91.8 | 92.5 | 92.7 | 92.5 | 91.1 | 91.5 | 95.8 | 100.0 | 98.3 | 93.1 | 93.4 | 147.4 |
| 40000 | 84.4 | 84.9 | 87.6 | 88.4 | 91.4 | 91.0 | 86.2 | 86.4 | 91.8 | 94.5 | 93.7 | 88.2 | 88.0 | 147.2 |
| 50000 | 81.5 | 81.1 | 84.1 | 82.6 | 83.2 | 84.1 | 81.2 | 80.9 | 88.8 | 90.1 | 87.8 | 82.7 | 83.4 | 146.6 |
| 63000 | 73.9 | 75.2 | 76.2 | 75.4 | 75.2 | 75.9 | 75.9 | 73.8 | 84.2 | 88.3 | 83.8 | 76.1 | 76.9 | 147.4 |
| 80000 | 64.5 | 66.8 | 67.2 | 70.8 | 69.3 | 70.8 | 67.8 | 68.3 | 74.4 | 78.5 | 74.0 | 66.3 | 67.1 | 145.3 |
| OASPL | 110.8 | 111.4 | 112.0 | 111.9 | 112.5 | 113.5 | 113.4 | 115.6 | 120.9 | 125.9 | 127.2 | 128.1 | 121.9 | 164.0 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 297.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 03-23-78 | TAPE NO. | N312 | IALPHA | SB59 | TAMB | 48.74 |
|-----------|--------------|------------|--------|--------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO, RDG. | ADH196 | PAMB | 29.4500 | RELHUM | 78.60 |

| MODEL | TEST POINT | ACOUSTIC RANGE | 12.2 M (40.0 FT) ARC | 138.7 SQ CM (21.49 SQ IN) - MODEL | SIZE | FREE-JET SPEED |
|-------|------------|----------------|-----------------------|------------------------------------|--------------------------|----------------|
| O200 | O208 | | | | 90.53 M/SEC (297.0 FPS) | |

02/15/80 9.180

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-303-FMODL X02081

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 67.6 | 70.3 | 71.3 | 71.4 | 73.0 | 73.9 | 73.8 | 75.2 | 80.7 | 89.3 | 91.7 | 93.9 | 84.7 | 167.3 |
| 63 | 69.7 | 71.7 | 72.4 | 73.6 | 74.2 | 75.2 | 75.5 | 76.7 | 83.6 | 90.8 | 93.5 | 94.7 | 84.2 | 168.5 |
| 80 | 70.9 | 72.3 | 74.7 | 74.4 | 75.5 | 76.6 | 77.0 | 78.8 | 85.4 | 91.7 | 94.1 | 94.9 | 83.4 | 169.0 |
| 100 | 71.4 | 73.6 | 75.2 | 76.7 | 76.5 | 78.1 | 78.2 | 80.4 | 87.3 | 92.2 | 93.7 | 93.7 | 82.6 | 168.6 |
| 125 | 74.1 | 74.3 | 76.2 | 77.4 | 77.6 | 79.5 | 80.0 | 81.9 | 88.0 | 92.3 | 94.9 | 93.8 | 81.5 | 169.3 |
| 160 | 75.4 | 75.3 | 77.8 | 79.5 | 79.9 | 81.0 | 80.7 | 82.8 | 89.5 | 92.8 | 94.4 | 92.3 | 81.0 | 169.0 |
| 200 | 74.5 | 77.6 | 79.8 | 78.8 | 80.2 | 81.6 | 81.8 | 83.3 | 90.7 | 94.1 | 94.4 | 91.5 | 80.8 | 169.5 |
| 250 | 75.8 | 76.0 | 78.0 | 78.7 | 79.4 | 80.8 | 81.5 | 84.2 | 90.8 | 96.4 | 95.3 | 92.1 | 82.2 | 171.0 |
| 315 | 75.2 | 77.2 | 78.8 | 79.9 | 80.6 | 81.9 | 83.0 | 84.7 | 91.3 | 95.2 | 95.3 | 92.0 | 81.6 | 171.1 |
| 400 | 76.6 | 78.4 | 79.3 | 80.6 | 81.0 | 82.5 | 83.2 | 85.2 | 90.4 | 93.7 | 92.5 | 88.9 | 79.5 | 169.7 |
| 500 | 77.6 | 80.3 | 79.9 | 81.7 | 81.1 | 82.4 | 83.0 | 85.0 | 89.0 | 92.8 | 90.8 | 85.5 | 75.0 | 168.8 |
| 630 | 76.5 | 80.1 | 82.5 | 82.4 | 82.7 | 83.1 | 83.7 | 85.7 | 89.5 | 92.1 | 89.2 | 84.5 | 74.0 | 168.8 |
| 800 | 76.6 | 78.2 | 80.8 | 81.0 | 82.8 | 84.6 | 84.1 | 85.8 | 89.3 | 91.0 | 87.8 | 82.1 | 72.2 | 168.5 |
| 1000 | 75.1 | 77.8 | 80.5 | 81.1 | 82.3 | 84.0 | 84.3 | 85.5 | 88.1 | 90.1 | 86.1 | 81.2 | 69.7 | 168.2 |
| 1250 | 74.5 | 78.2 | 79.8 | 80.7 | 82.3 | 84.3 | 83.3 | 85.0 | 86.6 | 88.1 | 83.1 | 78.1 | 67.5 | 167.5 |
| 1600 | 72.3 | 75.9 | 79.4 | 80.3 | 81.8 | 82.5 | 82.1 | 82.8 | 84.6 | 87.8 | 81.3 | 75.9 | 64.8 | 167.7 |
| 2000 | 68.6 | 73.7 | 77.1 | 80.0 | 81.8 | 82.4 | 80.3 | 81.6 | 82.7 | 84.0 | 78.1 | 72.3 | 61.1 | 167.2 |
| 2500 | 66.6 | 71.9 | 76.1 | 76.8 | 79.8 | 80.3 | 77.4 | 77.9 | 79.7 | 79.4 | 73.7 | 67.2 | 56.1 | 166.7 |
| 3150 | 57.5 | 66.5 | 70.2 | 71.5 | 75.4 | 76.0 | 73.0 | 71.8 | 74.8 | 76.0 | 69.0 | 56.9 | 41.9 | 166.4 |
| 4000 | 49.1 | 58.1 | 62.9 | 66.0 | 67.5 | 67.7 | 65.9 | 65.0 | 66.9 | 67.3 | 59.4 | 43.8 | 23.8 | 165.6 |
| 5000 | 35.8 | 44.6 | 52.5 | 56.5 | 61.2 | 61.3 | 56.0 | 54.5 | 56.7 | 54.2 | 45.0 | 25.2 | | 165.4 |
| 6300 | 15.0 | 26.5 | 36.9 | 39.9 | 42.9 | 44.6 | 40.9 | 38.2 | 41.6 | 35.6 | 21.3 | | | 164.7 |
| 8000 | | 7.7 | 13.4 | 16.8 | 18.6 | 17.5 | 11.8 | 15.6 | 9.0 | | | | | 163.5 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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OASPL 86.9 89.2 91.2 92.0 93.0 94.3 94.2 95.9 100.8 104.6 104.7 103.3 92.6 182.0
 PNL 93.0 96.5 99.5 100.9 102.5 103.5 102.3 103.6 106.8 110.1 108.7 105.3 94.4
 PNLT 93.0 96.5 100.3 101.5 103.9 104.6 102.3 104.2 107.4 110.1 109.8 105.3 95.5

DIAMETER RATIO 8.070 FREQUENCY SHIFT -9

TEST DATE 03-23-78 TAPE NO. N312 ALPHA SB59 TAMB 48.74
 LOCATION C41 ANECH CH AERO. RDG. ADH196 PAMB 29.4500 RELHUM 78.60

MODEL TEST POINT 0208 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400 SQ IN) - FULL 90.53 M/SEC (297.0 FPS)
 FREE-JET SPEED

02/15/80 9.18Q

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X02090
BACKGROUND FJB400-FMODL X05220

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250 81.1 85.0 85.0 85.8 86.3 87.7 90.4 93.3 95.5 102.1 107.3 114.0 120.9 145.4
315 83.3 84.6 85.6 87.7 89.9 90.7 92.9 97.2 104.7 109.4 115.3 110.7 146.7
400 85.4 86.1 86.7 86.4 88.2 80.7 91.5 93.4 98.2 108.5 112.4 116.3 108.8 148.2
500 86.1 86.7 88.5 88.3 89.3 91.7 93.4 95.3 100.0 110.4 114.5 116.4 106.1 149.1
630 85.7 88.6 89.6 89.1 92.0 93.6 94.7 97.4 102.6 111.2 115.3 115.8 103.4 149.3
800 89.1 87.9 90.4 90.7 91.5 94.4 96.0 98.9 104.9 112.0 115.6 113.8 100.2 149.2
1000 90.7 89.9 92.2 91.5 92.8 95.5 97.1 100.5 106.7 112.5 114.4 111.4 98.8 148.5
1250 89.7 92.3 94.3 93.3 94.4 97.3 98.4 102.1 107.6 112.9 114.8 109.9 98.1 148.8
1600 91.8 90.9 92.7 92.9 95.0 97.7 99.5 103.0 109.4 112.7 114.5 108.7 98.0 148.8
2000 91.5 92.4 93.5 93.2 94.3 97.5 99.8 103.8 110.0 115.3 114.3 108.7 98.8 149.8
2500 94.6 95.1 95.3 94.9 95.7 98.1 101.2 105.1 110.8 117.2 116.4 111.1 100.9 151.7
3150 98.3 98.8 96.8 96.6 96.9 99.3 101.2 105.9 111.3 116.4 116.9 112.1 101.3 151.8
4000 96.3 97.9 99.6 98.2 97.5 98.9 101.0 105.9 109.9 115.0 114.2 110.9 101.1 150.3
5000 95.5 97.3 98.5 99.1 100.0 102.1 106.0 109.5 114.9 112.6 108.5 98.3 149.9
6300 95.1 95.9 96.9 96.7 98.4 101.8 102.0 105.9 109.0 113.3 111.1 106.9 97.9 148.9
8000 95.6 96.3 96.9 96.5 97.8 100.5 102.0 104.6 109.1 112.4 110.0 105.9 96.7 148.6
10000 94.1 95.5 96.7 96.5 97.3 100.7 101.1 104.9 108.0 111.9 108.0 105.2 95.9 148.4
12500 91.9 93.7 95.3 96.1 97.6 99.2 99.7 103.6 106.2 109.0 106.2 103.7 95.1 147.2
16000 90.1 92.4 94.2 95.4 97.5 99.3 98.5 101.9 104.6 108.0 104.0 101.9 94.0 147.2
20000 85.2 90.2 91.3 93.0 96.4 97.9 95.9 99.1 102.5 104.8 101.2 99.2 92.3 146.4
25000 84.6 87.6 88.4 89.1 93.1 94.9 93.3 94.2 99.2 100.2 96.9 95.6 90.1 144.9
31500 83.8 83.5 86.2 88.2 89.5 89.2 89.5 89.2 91.2 95.5 98.0 95.0 90.8 85.2 144.9
40000 78.9 78.9 81.8 83.0 86.9 87.6 84.2 86.5 91.1 93.1 91.0 85.0 81.3 144.7
50000 72.0 73.9 74.5 77.4 79.2 80.4 79.4 80.0 86.6 87.1 85.4 80.5 75.1 143.3
63000 66.2 68.1 68.4 70.9 71.1 72.4 73.5 73.3 81.3 80.7 77.8 73.8 69.6 142.3
80000 60.3 60.6 62.2 65.6 64.7 67.0 65.9 67.2 75.9 77.4 73.0 65.1 62.0 144.1

OASPL 105.8 106.7 107.7 107.6 108.8 111.1 112.2 116.0 120.6 125.7 126.2 124.9 116.9 162.4

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TANB 47.30
LOCATION C41 ANECH CH AERO. RDG. ADH197 PAMB 29.4500 RELHUM 81.60

MODEL TEST POINT ACQUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 120.70 M/SEC (396.0 FPS)
O209

227

ORIGINAL PAGE 13
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02/15/80 5.180

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X02090

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | | |
| 250 | 88.1 | 90.8 | 89.5 | 88.8 | 87.8 | 87.7 | 88.5 | 89.7 | 93.7 | 100.4 | 104.5 | 110.9 | 108.1 | 142.7 | |
| 315 | 88.1 | 90.8 | 89.5 | 88.8 | 89.5 | 90.1 | 89.4 | 90.2 | 96.0 | 105.6 | 109.2 | 113.9 | 108.8 | 145.7 | |
| 400 | 90.9 | 90.9 | 90.5 | 89.0 | 90.0 | 90.9 | 90.7 | 91.6 | 98.5 | 108.4 | 112.6 | 116.0 | 109.1 | 148.1 | |
| 500 | 92.1 | 91.9 | 91.2 | 89.6 | 91.2 | 92.1 | 92.7 | 93.6 | 101.1 | 109.3 | 113.7 | 116.2 | 108.5 | 148.7 | |
| 630 | 93.3 | 92.8 | 93.3 | 91.6 | 93.9 | 94.0 | 93.9 | 95.5 | 103.5 | 110.3 | 114.4 | 115.4 | 107.9 | 148.9 | |
| 800 | 93.2 | 94.9 | 94.6 | 92.6 | 93.5 | 94.9 | 95.2 | 96.9 | 105.7 | 111.3 | 113.9 | 114.3 | 109.1 | 148.8 | |
| 1000 | 96.7 | 94.2 | 95.4 | 94.2 | 94.9 | 96.1 | 96.4 | 98.6 | 106.5 | 111.6 | 114.1 | 112.7 | 108.3 | 146.6 | |
| 1250 | 97.6 | 95.9 | 97.0 | 94.9 | 96.7 | 98.1 | 97.8 | 100.2 | 108.5 | 111.6 | 113.9 | 111.5 | 108.3 | 148.7 | |
| 1600 | 97.3 | 98.7 | 99.4 | 97.0 | 97.5 | 98.7 | 99.1 | 101.3 | 109.2 | 114.2 | 113.8 | 111.6 | 109.1 | 149.7 | |
| 2000 | 99.4 | 97.4 | 97.9 | 96.8 | 97.0 | 98.7 | 99.7 | 102.3 | 110.5 | 116.6 | 116.4 | 114.6 | 111.8 | 152.0 | |
| 2500 | 99.0 | 98.9 | 98.7 | 97.2 | 98.4 | 99.6 | 101.4 | 104.0 | 111.7 | 116.6 | 117.8 | 116.5 | 113.2 | 153.0 | |
| 3150 | 100.7 | 100.6 | 100.1 | 98.6 | 99.6 | 101.3 | 101.8 | 105.3 | 111.1 | 116.0 | 115.8 | 116.0 | 113.6 | 152.3 | |
| 4000 | 103.5 | 103.4 | 100.8 | 99.8 | 100.9 | 101.4 | 102.2 | 106.1 | 110.5 | 115.4 | 113.6 | 112.8 | 109.9 | 151.1 | |
| 5000 | 102.2 | 103.4 | 104.5 | 102.3 | 103.1 | 103.0 | 103.6 | 106.2 | 110.1 | 114.0 | 112.4 | 111.5 | 109.9 | 150.6 | |
| 6300 | 102.8 | 102.2 | 103.1 | 103.4 | 102.4 | 104.8 | 103.5 | 106.1 | 110.2 | 113.2 | 111.2 | 110.4 | 108.6 | 150.3 | |
| 8000 | 102.3 | 102.4 | 102.5 | 101.3 | 101.8 | 103.5 | 103.5 | 104.7 | 109.3 | 112.8 | 109.4 | 110.0 | 108.0 | 149.9 | |
| 10000 | 102.7 | 102.6 | 102.4 | 101.0 | 101.4 | 103.7 | 102.6 | 105.1 | 108.1 | 110.5 | 108.4 | 109.3 | 108.1 | 149.5 | |
| 12500 | 100.9 | 101.6 | 101.9 | 100.7 | 101.6 | 102.2 | 101.2 | 103.9 | 107.0 | 110.1 | 106.8 | 108.0 | 107.6 | 149.4 | |
| 16000 | 98.1 | 99.2 | 100.0 | 99.8 | 102.1 | 102.3 | 100.1 | 102.2 | 105.8 | 107.9 | 105.0 | 106.3 | 106.8 | 149.3 | |
| 20000 | 98.7 | 99.8 | 100.2 | 99.8 | 100.9 | 100.9 | 97.9 | 99.8 | 104.0 | 104.8 | 102.0 | 103.8 | 105.3 | 149.2 | |
| 25000 | 93.2 | 97.0 | 96.7 | 96.8 | 97.6 | 97.6 | 97.9 | 95.6 | 95.7 | 99.9 | 102.2 | 99.8 | 99.0 | 100.8 | 148.2 |
| 31500 | 91.8 | 93.6 | 92.9 | 92.2 | 92.3 | 92.5 | 91.0 | 91.7 | 96.7 | 98.5 | 97.0 | 94.5 | 98.0 | 147.5 | |
| 40000 | 87.4 | 86.4 | 88.2 | 89.2 | 91.5 | 90.6 | 86.3 | 87.4 | 92.3 | 92.6 | 91.5 | 90.0 | 92.0 | 147.1 | |
| 50000 | 84.9 | 83.7 | 85.1 | 84.8 | 83.8 | 83.4 | 81.4 | 80.6 | 88.4 | 87.5 | 85.2 | 84.6 | 87.7 | 146.5 | |
| 63000 | 77.0 | 77.7 | 76.9 | 78.2 | 75.1 | 75.4 | 75.7 | 74.2 | 83.3 | 84.3 | 80.3 | 75.4 | 79.1 | 145.8 | |
| 80000 | 67.0 | 68.2 | 67.6 | 69.1 | 68.7 | 70.0 | 67.3 | 67.3 | 73.5 | 74.5 | 70.4 | 65.5 | 69.3 | 143.6 | |
| QASPL | 12.5 | 112.7 | 112.8 | 111.7 | 112.4 | 113.5 | 113.1 | 115.6 | 121.0 | 125.6 | 126.0 | 126.2 | 122.5 | 163.4 | |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 396.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 03-23-78 | TAPE NO. | N312 | ALPHA | SB59 | TAMB | 47.30 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH197 | PAMB | 29.4500 | RELHUM | 81.60 |

| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
|-------|------------|-----------------------|------------------------------------|---------------------------|
| 0200 | 0209 | 12.2 M (40.0 FT) ARC | 138.7 SQ CM (21.49 SQ IN) - MODEL | 120.70 M/SEC (396.0 FPS) |

02/15/80 9.190

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMOOL X02091

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 69.6 | 71.1 | 71.8 | 71.0 | 72.4 | 73.5 | 73.1 | 73.6 | 79.8 | 88.6 | 91.3 | 92.5 | 82.2 | 166.2 |
| 63 | 70.7 | 72.1 | 72.5 | 71.6 | 73.6 | 74.6 | 75.1 | 75.6 | 82.4 | 89.5 | 92.4 | 92.7 | 81.6 | 166.9 |
| 80 | 71.9 | 73.0 | 74.5 | 73.6 | 76.3 | 76.5 | 76.3 | 77.5 | 84.7 | 90.5 | 93.1 | 91.8 | 80.9 | 167.0 |
| 100 | 71.8 | 75.0 | 75.8 | 74.5 | 75.8 | 77.3 | 77.5 | 78.9 | 86.9 | 91.4 | 92.5 | 90.6 | 81.9 | 166.9 |
| 125 | 75.1 | 74.2 | 76.5 | 76.0 | 77.1 | 78.5 | 78.6 | 80.4 | 87.6 | 91.6 | 92.5 | 88.8 | 80.9 | 166.7 |
| 160 | 75.8 | 75.8 | 78.0 | 76.6 | 78.8 | 80.4 | 79.9 | 81.9 | 89.5 | 91.4 | 92.1 | 87.4 | 80.5 | 166.8 |
| 200 | 75.3 | 78.4 | 80.2 | 78.6 | 79.4 | 80.8 | 81.1 | 82.8 | 90.0 | 93.9 | 91.8 | 87.2 | 80.8 | 167.8 |
| 250 | 77.0 | 76.7 | 78.4 | 78.1 | 78.7 | 80.6 | 81.4 | 83.6 | 91.1 | 96.0 | 94.1 | 89.7 | 83.0 | 170.1 |
| 315 | 76.3 | 78.0 | 79.0 | 78.3 | 79.9 | 81.3 | 82.9 | 85.1 | 91.9 | 95.6 | 95.0 | 91.1 | 83.6 | 171.1 |
| 400 | 77.5 | 79.3 | 80.0 | 79.3 | 80.8 | 82.7 | 83.0 | 86.0 | 91.0 | 94.6 | 92.6 | 89.9 | 82.9 | 170.4 |
| 500 | 79.8 | 81.6 | 80.3 | 80.3 | 81.8 | 82.5 | 83.2 | 86.5 | 90.0 | 93.7 | 89.9 | 86.1 | 78.3 | 169.3 |
| 630 | 78.0 | 81.2 | 83.8 | 82.4 | 83.8 | 83.8 | 84.3 | 86.3 | 89.3 | 91.8 | 88.1 | 84.1 | 77.1 | 168.7 |
| 800 | 78.1 | 79.6 | 82.0 | 83.2 | 82.9 | 85.4 | 83.9 | 85.9 | 89.2 | 90.7 | 86.5 | 82.3 | 74.7 | 168.5 |
| 1000 | 77.1 | 79.6 | 81.3 | 81.0 | 82.1 | 83.9 | 83.8 | 84.4 | 88.0 | 90.0 | 84.3 | 81.2 | 73.0 | 168.0 |
| 1250 | 77.0 | 79.4 | 80.8 | 80.5 | 81.5 | 84.1 | 82.8 | 84.6 | 86.5 | 87.4 | 82.8 | 79.7 | 71.7 | 167.6 |
| 1600 | 74.3 | 77.8 | 79.9 | 79.9 | 81.5 | 82.3 | 81.1 | 83.1 | 85.0 | 86.3 | 80.3 | 77.1 | 68.8 | 167.5 |
| 2000 | 70.6 | 74.8 | 77.6 | 78.7 | 81.8 | 82.2 | 79.8 | 81.2 | 83.5 | 83.5 | 77.5 | 73.7 | 64.9 | 167.4 |
| 2500 | 69.4 | 74.2 | 77.0 | 78.1 | 80.1 | 80.3 | 77.0 | 78.1 | 80.8 | 79.2 | 72.7 | 68.5 | 58.5 | 167.4 |
| 3150 | 60.6 | 69.0 | 71.6 | 73.5 | 75.4 | 76.0 | 73.4 | 72.4 | 74.8 | 74.1 | 67.1 | 58.7 | 45.7 | 166.3 |
| 4000 | 52.9 | 60.8 | 64.0 | 65.6 | 67.0 | 67.6 | 65.8 | 65.1 | 67.7 | 65.7 | 58.1 | 45.2 | 28.4 | 165.6 |
| 5000 | 38.7 | 46.1 | 53.1 | 57.3 | 61.3 | 60.9 | 56.1 | 55.4 | 57.2 | 52.3 | 42.8 | 27.0 | 0.5 | 165.3 |
| 6300 | 18.4 | 29.1 | 37.9 | 42.0 | 43.5 | 43.8 | 41.1 | 37.8 | 41.2 | 33.0 | 18.8 | | 164.6 | |
| 8000 | | | 8.4 | 16.2 | 16.7 | 18.1 | 17.3 | 12.2 | 14.7 | 5.0 | | | 164.0 | |
| 10000 | | | | | | | | | | | | | 161.7 | |

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|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| OASPL | 88.3 | 90.3 | 91.9 | 91.6 | 92.9 | 94.2 | 93.9 | 95.9 | 100.8 | 104.4 | 103.4 | 101.0 | 92.5 | 181.4 |
| PWL | 94.9 | 98.1 | 100.3 | 100.8 | 102.5 | 103.4 | 101.9 | 103.4 | 107.1 | 109.9 | 107.8 | 104.2 | 96.2 | |
| PNLT | 94.9 | 98.1 | 101.1 | 101.4 | 103.9 | 104.5 | 101.9 | 103.4 | 107.7 | 109.9 | 107.8 | 104.2 | 97.3 | |

DIAMETER RATIO 8.070 FREQUENCY SHIFT -9

TEST DATE 03-23-78 TAPE NO. N312 ALPHA SB59 TAMB 47.30
LOCATION C41 ANECH CH AERO. RDG. ADH197 PAMB 29.4500 RELNUM 81.60

MODEL TEST POINT ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 120.70 M/SEC (396.0 FPS)
O209

02/15/80 9.180

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X02100
BACKGROUND 0000000000 000000

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50
63
80
100
125
160
200

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 82.5 | 87.6 | 86.3 | 86.4 | 87.0 | 89.6 | 92.0 | 94.1 | 96.1 | 102.7 | 107.0 | 113.0 | 110.4 | 144.8 |
| 315 | 83.9 | 86.4 | 86.7 | 87.5 | 89.6 | 91.9 | 92.3 | 94.2 | 97.7 | 104.2 | 108.4 | 114.6 | 110.7 | 146.1 |
| 400 | 85.2 | 87.7 | 88.2 | 87.5 | 89.3 | 91.5 | 92.6 | 94.7 | 99.2 | 108.0 | 111.4 | 116.3 | 111.8 | 148.2 |
| 500 | 86.0 | 88.5 | 89.5 | 89.3 | 90.4 | 92.8 | 94.2 | 95.8 | 100.3 | 108.9 | 112.2 | 116.7 | 112.1 | 148.7 |
| 630 | 87.1 | 89.6 | 90.6 | 90.2 | 92.8 | 94.4 | 95.5 | 97.9 | 102.4 | 109.5 | 112.6 | 117.0 | 112.9 | 149.3 |
| 800 | 90.3 | 90.1 | 91.7 | 91.9 | 92.8 | 95.1 | 96.3 | 99.4 | 104.2 | 110.0 | 112.1 | 116.5 | 112.7 | 149.1 |
| 1000 | 93.2 | 92.7 | 94.2 | 93.5 | 93.9 | 96.5 | 97.9 | 100.3 | 105.5 | 110.3 | 110.4 | 115.9 | 112.5 | 148.7 |
| 1250 | 91.3 | 94.0 | 95.6 | 94.9 | 95.7 | 98.1 | 98.7 | 101.9 | 105.8 | 110.6 | 112.3 | 116.4 | 112.4 | 149.4 |
| 1600 | 92.6 | 92.7 | 93.4 | 94.0 | 95.6 | 98.2 | 99.1 | 102.2 | 106.2 | 109.8 | 111.2 | 116.0 | 112.5 | 148.9 |
| 2000 | 93.2 | 94.5 | 94.7 | 94.5 | 95.3 | 97.0 | 99.3 | 102.3 | 106.5 | 109.6 | 110.5 | 115.5 | 110.8 | 148.5 |
| 2500 | 92.6 | 94.1 | 94.8 | 95.1 | 96.2 | 98.3 | 100.0 | 102.9 | 105.8 | 110.2 | 111.1 | 116.1 | 109.4 | 148.9 |
| 3150 | 94.1 | 95.1 | 95.4 | 95.4 | 96.0 | 98.6 | 100.2 | 103.9 | 106.3 | 109.2 | 110.9 | 115.1 | 108.4 | 148.4 |
| 4000 | 93.9 | 94.4 | 95.2 | 94.4 | 96.0 | 98.1 | 100.0 | 103.2 | 105.7 | 107.8 | 111.2 | 113.9 | 107.9 | 147.7 |
| 5000 | 93.2 | 94.0 | 94.3 | 94.8 | 96.4 | 98.5 | 99.9 | 103.3 | 105.3 | 107.9 | 110.9 | 112.8 | 107.0 | 147.4 |
| 6300 | 91.1 | 94.2 | 94.5 | 94.9 | 96.0 | 98.8 | 99.8 | 103.2 | 105.3 | 107.1 | 109.1 | 111.9 | 106.6 | 146.8 |
| 8000 | 90.7 | 94.8 | 95.4 | 94.8 | 95.9 | 98.5 | 99.1 | 101.7 | 104.6 | 106.2 | 108.0 | 110.7 | 105.5 | 146.2 |
| 10000 | 88.4 | 93.4 | 95.0 | 94.6 | 96.6 | 98.5 | 98.7 | 101.8 | 103.3 | 105.2 | 106.5 | 110.1 | 104.7 | 146.0 |
| 12500 | 85.5 | 91.5 | 93.2 | 93.7 | 95.2 | 97.3 | 97.3 | 99.7 | 101.3 | 102.8 | 103.8 | 107.3 | 103.0 | 144.5 |
| 16000 | 83.0 | 89.6 | 91.7 | 92.6 | 94.7 | 96.9 | 95.6 | 98.3 | 99.5 | 101.7 | 102.2 | 105.3 | 101.2 | 144.3 |
| 20000 | 77.7 | 86.7 | 88.1 | 89.9 | 93.6 | 95.1 | 93.1 | 95.3 | 97.3 | 98.3 | 93.2 | 103.1 | 99.0 | 143.6 |
| 25000 | 75.1 | 82.9 | 85.5 | 85.4 | 90.9 | 91.5 | 89.3 | 90.5 | 94.6 | 93.9 | 95.2 | 98.9 | 96.6 | 142.2 |
| 31500 | 73.9 | 78.5 | 82.7 | 84.6 | 84.9 | 85.9 | 86.1 | 87.4 | 91.5 | 92.8 | 93.4 | 95.0 | 90.4 | 142.1 |
| 40000 | 69.4 | 73.5 | 77.9 | 79.5 | 84.0 | 84.4 | 80.8 | 83.1 | 86.4 | 87.5 | 89.1 | 89.8 | 87.3 | 141.7 |
| 50000 | 63.3 | 68.6 | 70.3 | 73.6 | 75.9 | 77.3 | 76.1 | 75.9 | 82.3 | 81.7 | 83.6 | 85.9 | 82.0 | 140.7 |
| 63000 | 59.7 | 63.9 | 65.1 | 67.2 | 68.4 | 69.7 | 70.8 | 69.8 | 78.0 | 75.0 | 78.1 | 80.5 | 76.5 | 140.5 |
| 80000 | 56.4 | 57.4 | 59.4 | 62.5 | 62.0 | 64.8 | 63.5 | 64.1 | 72.4 | 69.5 | 74.2 | 74.5 | 70.1 | 141.9 |

OASPL 103.6 105.5 106.3 106.3 107.7 110.0 110.9 113.9 117.0 121.0 123.1 127.5 123.0 160.9

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 53.60
LOCATION C41 ANECH CH AERG. RDG. ADH194 PAMB 29.4200 RELNUM 65.60

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
O200 0210 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.39 SQ IN) - MODEL O. M/SEC (O. FPS)

02/15/80 9.180

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X02100

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

DASPL

103.6

105.5

106.3

107.7

110.0

110.9

113.9

117.0

121.0

123.1

127.5

123.0

160.9

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MODEL/FULL SIZE SCALE FACTOR
INPUT 1.000 CALC. 1.000

FREE JET VELOCITY (FT/SEC)
FREE JET DIAMETER (IN)

REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

TEST DATE 03-23-78 TAPE NO. N312 ALPHA SB59 TAMB 53.60
LOCATION C41 ANECH CH AERO. RDG. ADH194 PAMB 29.4200 RELHUM 65.60

MODEL TEST POINT
O200 O210

ACOUSTIC RANGE
12.2 M (40.0 FT) ARC

SIZE
138.7 SQ CM (21.49 SQ IN)

FREE-JET SPEED
O. M/SEC (O. FPS)

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X02101

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 63.9 | 67.9 | 69.5 | 69.5 | 71.8 | 74.0 | 75.0 | 76.8 | 80.5 | 88.3 | 90.1 | 92.8 | 84.9 | 166.3 |
| 63 | 64.6 | 68.7 | 70.8 | 71.3 | 72.8 | 75.3 | 76.6 | 77.8 | 81.6 | 89.1 | 90.9 | 93.1 | 85.2 | 166.9 |
| 80 | 65.7 | 69.8 | 71.9 | 72.1 | 75.1 | 76.9 | 77.9 | 79.9 | 83.6 | 89.6 | 91.2 | 93.4 | 85.9 | 167.4 |
| 100 | 68.9 | 70.2 | 72.8 | 73.9 | 75.1 | 77.6 | 78.6 | 81.4 | 85.3 | 90.1 | 90.6 | 92.8 | 85.5 | 167.2 |
| 125 | 71.6 | 72.7 | 75.3 | 75.4 | 76.1 | 78.9 | 80.1 | 82.1 | 86.6 | 90.3 | 88.9 | 92.0 | 85.1 | 166.8 |
| 160 | 69.5 | 73.9 | 76.5 | 76.6 | 77.8 | 80.3 | 80.8 | 83.6 | 86.8 | 90.5 | 90.5 | 92.3 | 84.6 | 167.5 |
| 200 | 70.5 | 72.3 | 74.2 | 75.5 | 77.5 | 80.3 | 81.0 | 83.8 | 87.0 | 89.4 | 89.2 | 91.5 | 84.2 | 167.1 |
| 250 | 70.9 | 73.8 | 75.3 | 75.8 | 77.1 | 78.9 | 81.1 | 83.6 | 87.0 | 88.9 | 88.2 | 90.6 | 81.8 | 166.6 |
| 315 | 70.1 | 73.1 | 75.1 | 76.2 | 77.7 | 80.0 | 81.5 | 83.9 | 86.1 | 89.2 | 88.4 | 90.7 | 79.7 | 167.0 |
| 400 | 70.8 | 73.7 | 75.0 | 76.1 | 77.2 | 79.9 | 81.4 | 84.6 | 86.2 | 87.8 | 87.6 | 89.0 | 77.7 | 166.5 |
| 500 | 70.1 | 72.6 | 74.7 | 74.9 | 76.9 | 79.2 | 80.9 | 83.6 | 85.2 | 86.0 | 87.5 | 87.2 | 76.2 | 165.9 |
| 630 | 69.0 | 71.9 | 73.6 | 75.0 | 77.1 | 79.3 | 80.6 | 83.5 | 84.6 | 85.8 | 86.6 | 85.4 | 74.3 | 165.5 |
| 800 | 66.4 | 71.6 | 73.4 | 74.8 | 76.4 | 79.4 | 80.2 | 83.1 | 84.2 | 84.5 | 84.4 | 83.8 | 72.8 | 165.0 |
| 1000 | 65.5 | 72.0 | 74.2 | 74.5 | 76.1 | 79.0 | 79.3 | 81.4 | 83.4 | 83.4 | 82.9 | 81.9 | 70.4 | 164.4 |
| 1250 | 62.7 | 70.2 | 73.5 | 74.1 | 76.8 | 78.9 | 78.8 | 81.3 | 81.8 | 82.0 | 80.9 | 80.5 | 68.2 | 164.1 |
| 1600 | 58.9 | 67.8 | 71.2 | 72.9 | 75.0 | 77.4 | 77.1 | 78.9 | 79.4 | 79.1 | 77.3 | 76.4 | 64.2 | 162.7 |
| 2000 | 55.5 | 65.2 | 69.3 | 71.6 | 74.4 | 76.8 | 75.3 | 77.3 | 77.2 | 77.3 | 74.7 | 72.7 | 59.3 | 162.5 |
| 2500 | 48.4 | 61.1 | 64.9 | 68.2 | 72.7 | 74.5 | 72.2 | 73.6 | 74.1 | 72.7 | 69.9 | 67.7 | 52.3 | 161.7 |
| 3150 | 42.5 | 54.9 | 60.4 | 62.2 | 68.6 | 69.5 | 67.1 | 67.2 | 69.5 | 65.8 | 62.5 | 58.6 | 41.5 | 160.4 |
| 4000 | 35.0 | 45.7 | 53.8 | 58.1 | 59.7 | 61.1 | 60.9 | 60.8 | 62.6 | 60.1 | 54.5 | 45.7 | 20.8 | 160.3 |
| 5000 | 20.8 | 33.2 | 42.8 | 47.6 | 53.8 | 54.7 | 50.6 | 51.1 | 51.3 | 47.2 | 40.4 | 26.8 | 159.9 | |
| 6300 | | 14.1 | 23.1 | 30.8 | 35.6 | 37.7 | 35.8 | 33.2 | 35.1 | 27.2 | 17.1 | | 158.9 | |
| 8000 | | | | 5.2 | 9.9 | 12.4 | 12.4 | 7.8 | 9.4 | | | | 158.6 | |
| 10000 | | | | | | | | | | | | | 160.0 | |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|-------|------|-------|-------|-------|-------|-------|------|-------|
| OASPL | 80.6 | 83.9 | 86.1 | 86.9 | 88.7 | 91.1 | 92.0 | 94.5 | 97.0 | 100.1 | 100.4 | 102.4 | 94.3 | 178.8 |
| PNL | 84.8 | 89.4 | 92.5 | 94.1 | 96.7 | 99.0 | 98.7 | 100.8 | 102.5 | 104.3 | 103.8 | 104.8 | 95.3 | |
| PNLT | 84.8 | 89.4 | 92.5 | 94.1 | 98.1 | 100.2 | 98.7 | 100.8 | 103.1 | 104.3 | 104.8 | 104.8 | 96.4 | |

DIAMETER RATIO 8.070 FREQUENCY SHIFT -9

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 53.60
 LOCATION C41 ANECH CH AERO. RDG. ADH194 PAMB 29.4200 RELHJM 65.60

MODEL TEST POINT 0210 ACOUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE FREE-JET SPEED
 O200 0. M/SEC (O. FPS)

02/15/80 9.180

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X02110
BACKGROUND FJB300-FMODL X05230

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50
63
80

100
125
150
200

250 78.5 82.5 81.5 82.8 83.9 85.3 87.4 89.9 92.3 98.6 103.5 110.0 106.6 141.5
315 79.9 81.6 82.9 83.4 85.3 87.2 88.0 90.0 90.0 94.2 101.0 104.9 111.3 107.2 142.8
400 81.9 83.4 84.2 83.5 85.6 87.4 88.6 90.7 95.5 104.8 108.2 112.6 105.8 144.4
500 82.9 83.8 86.0 85.1 86.6 88.5 90.2 92.3 96.8 105.4 109.5 112.2 103.6 144.6
630 80.9 85.4 86.9 86.4 88.8 90.1 91.9 94.2 99.4 106.5 109.6 111.5 100.2 144.6
800 85.8 85.1 87.4 88.4 89.0 91.6 93.3 95.9 101.2 108.0 108.9 109.5 96.7 144.2
1000 87.4 86.2 88.7 88.8 90.1 92.5 94.1 97.5 103.0 108.1 108.2 106.9 93.8 143.6
1250 86.5 88.8 90.6 90.9 92.2 94.1 94.9 98.6 103.1 108.1 109.8 105.4 92.6 144.1
1600 88.3 88.2 89.9 90.2 92.3 94.4 95.8 99.0 103.4 107.8 108.2 103.2 91.7 143.4
2000 87.2 87.7 90.2 90.3 91.6 94.0 96.3 99.3 104.0 107.8 107.5 102.2 91.8 143.2
2500 87.8 89.1 90.6 91.1 92.9 94.3 97.0 99.6 103.3 108.4 107.4 102.4 92.1 143.5
3150 88.3 89.1 90.6 91.9 93.2 95.1 96.9 100.6 103.8 107.2 107.1 103.6 92.3 143.3
4000 89.8 90.1 91.6 91.9 93.0 95.4 96.5 100.2 103.6 105.7 106.2 102.1 91.9 142.6
5000 89.7 90.0 91.3 92.0 93.4 95.2 97.4 100.0 102.8 106.1 106.3 102.8 93.0 142.8
6300 90.0 90.4 91.4 93.2 95.8 96.7 100.4 102.2 105.5 105.6 102.5 93.1 142.6
8000 92.1 92.0 91.9 91.7 93.5 95.2 96.0 99.1 102.3 104.4 105.2 101.9 93.4 142.4
10000 90.3 91.0 92.6 92.0 94.0 95.9 95.6 99.2 100.9 103.8 104.2 102.0 92.6 142.4
12500 87.8 89.1 90.8 91.0 92.8 94.4 94.4 97.3 99.2 101.9 101.5 99.9 91.6 141.3
16000 85.1 87.4 89.0 89.9 92.8 93.8 92.7 95.9 97.3 100.2 98.5 97.9 90.0 140.9
20000 80.1 84.3 85.9 87.3 91.7 92.5 90.7 93.4 95.4 96.9 95.8 95.0 87.7 140.2
25000 78.1 81.9 83.2 83.7 88.8 89.4 87.5 88.5 92.8 92.1 91.7 91.1 86.3 138.9
31500 77.1 78.2 81.6 82.5 83.3 84.3 84.8 85.8 89.9 90.5 89.1 86.2 81.0 139.0
40000 72.1 73.1 76.5 78.3 83.0 83.3 80.0 81.4 85.2 85.2 84.6 81.3 77.5 139.0
50000 66.9 69.1 69.7 73.2 75.5 76.3 75.9 75.5 81.0 79.3 78.5 76.4 72.0 137.8
63000 62.6 64.6 65.7 67.2 67.8 68.8 70.5 69.8 76.6 73.5 72.4 70.4 67.1 137.5
80000 57.3 58.8 59.9 62.9 62.6 64.6 64.0 63.2 70.6 66.5 67.6 62.2 59.3 138.4

QASPL 100.5 101.3 102.7 103.0 104.8 106.6 107.7 110.9 114.4 118.8 119.9 120.3 113.0 156.5

TEST DATE 03-23-78 TAPE NO. N312 ALPHA SB59 TAMB 56.48
LOCATION C41 ANECH CH AERO. RDG. ADH20(1) PAMB 29.4400 RELHUM 66.80

MODEL TEST POINT 0211 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 90.53 M/SEC (297.0 FPS) FREE-JET SPEED

233

02/15/80 9.180

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FU-300-FMODL X02110

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 84.0 | 87.0 | 85.0 | 85.2 | 85.1 | 85.3 | 86.0 | 87.1 | 91.5 | 97.6 | 101.1 | 107.8 | 105.0 | 139.5 |
| 315 | 84.0 | 87.0 | 85.0 | 85.9 | 86.6 | 87.3 | 87.0 | 87.8 | 93.8 | 102.5 | 105.6 | 110.6 | 105.6 | 142.4 |
| 400 | 85.4 | 86.3 | 86.5 | 85.9 | 86.8 | 87.6 | 87.9 | 89.3 | 95.5 | 103.7 | 107.8 | 111.5 | 105.4 | 143.6 |
| 500 | 87.1 | 87.9 | 87.7 | 87.6 | 88.0 | 88.7 | 89.6 | 91.0 | 98.1 | 104.9 | 108.2 | 111.7 | 103.8 | 144.0 |
| 630 | 88.3 | 88.4 | 89.6 | 89.0 | 90.1 | 90.3 | 91.1 | 92.7 | 99.9 | 106.5 | 107.7 | 110.5 | 102.2 | 143.7 |
| 800 | 86.5 | 90.0 | 90.5 | 91.0 | 90.5 | 91.9 | 92.5 | 94.3 | 101.8 | 106.6 | 107.2 | 108.4 | 100.9 | 143.2 |
| 1000 | 91.4 | 89.8 | 91.1 | 91.4 | 91.6 | 92.8 | 93.4 | 95.8 | 101.8 | 106.6 | 108.6 | 106.7 | 99.3 | 143.2 |
| 1250 | 93.0 | 90.9 | 92.4 | 93.5 | 93.8 | 94.5 | 94.3 | 96.9 | 102.3 | 106.2 | 107.0 | 104.2 | 98.0 | 142.5 |
| 1600 | 92.1 | 93.5 | 94.3 | 93.0 | 94.0 | 95.0 | 95.2 | 97.3 | 103.0 | 106.4 | 106.4 | 103.4 | 98.0 | 142.5 |
| 2000 | 93.9 | 92.9 | 93.7 | 93.1 | 93.4 | 94.7 | 95.9 | 97.8 | 102.5 | 107.3 | 106.5 | 103.7 | 98.7 | 142.9 |
| 2500 | 92.7 | 92.4 | 94.0 | 94.1 | 94.9 | 95.2 | 96.7 | 98.3 | 103.4 | 106.5 | 106.8 | 105.7 | 99.9 | 143.2 |
| 3150 | 93.3 | 93.8 | 94.4 | 94.9 | 95.3 | 96.2 | 97.0 | 99.6 | 103.6 | 105.4 | 106.2 | 104.6 | 99.9 | 143.0 |
| 4000 | 93.8 | 93.8 | 94.5 | 95.2 | 95.3 | 96.8 | 96.8 | 99.5 | 103.3 | 106.4 | 107.1 | 106.0 | 101.9 | 143.7 |
| 5000 | 95.3 | 94.9 | 95.6 | 95.5 | 96.0 | 97.0 | 98.1 | 99.8 | 103.4 | 106.5 | 107.1 | 106.8 | 102.8 | 144.2 |
| 6300 | 95.0 | 94.8 | 95.3 | 95.1 | 96.2 | 98.0 | 97.9 | 100.7 | 104.1 | 105.9 | 107.1 | 106.3 | 103.3 | 144.4 |
| 8000 | 95.2 | 95.1 | 95.2 | 95.8 | 97.0 | 98.0 | 97.9 | 100.0 | 102.9 | 105.6 | 106.3 | 106.6 | 102.8 | 144.5 |
| 10000 | 97.1 | 96.6 | 96.0 | 96.2 | 97.7 | 98.9 | 97.5 | 100.1 | 101.5 | 104.0 | 104.0 | 105.0 | 102.2 | 144.1 |
| 12500 | 95.0 | 95.4 | 96.6 | 95.3 | 96.4 | 97.4 | 96.3 | 98.3 | 100.4 | 103.0 | 101.8 | 103.7 | 101.3 | 143.6 |
| 16000 | 92.0 | 93.0 | 94.2 | 95.0 | 96.8 | 96.8 | 94.9 | 97.1 | 99.1 | 100.4 | 99.8 | 101.5 | 99.6 | 143.3 |
| 20000 | 90.9 | 92.5 | 93.2 | 92.3 | 95.7 | 95.5 | 93.0 | 94.8 | 97.8 | 96.8 | 96.7 | 98.4 | 98.7 | 143.0 |
| 25000 | 85.3 | 88.8 | 89.6 | 88.7 | 92.9 | 92.4 | 90.1 | 90.4 | 94.9 | 95.2 | 94.2 | 93.8 | 94.3 | 142.2 |
| 31500 | 82.5 | 85.6 | 86.0 | 86.8 | 86.9 | 87.3 | 87.1 | 87.1 | 91.7 | 91.5 | 91.3 | 90.5 | 92.1 | 141.8 |
| 40000 | 78.7 | 79.4 | 82.4 | 83.4 | 87.0 | 86.3 | 82.5 | 83.2 | 87.8 | 85.9 | 85.6 | 86.0 | 87.0 | 142.0 |
| 50000 | 75.3 | 75.6 | 78.1 | 78.2 | 79.5 | 79.3 | 78.4 | 77.3 | 84.4 | 81.1 | 80.5 | 81.0 | 83.1 | 141.4 |
| 63000 | 69.1 | 70.6 | 70.4 | 71.4 | 71.4 | 71.8 | 73.0 | 71.6 | 79.5 | 75.1 | 76.7 | 73.9 | 76.6 | 140.8 |
| 80000 | 61.3 | 63.0 | 63.6 | 67.1 | 66.2 | 67.6 | 66.5 | 64.8 | 69.7 | 65.3 | 66.9 | 64.1 | 66.8 | 139.8 |
| OASPL | 105.8 | 105.9 | 106.5 | 106.5 | 107.6 | 108.5 | 108.3 | 110.4 | 114.6 | 118.2 | 119.3 | 120.3 | 115.2 | 157.1 |

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 297.00 REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 56.48
 LOCATION C41 ANECH CH AERO. RDG. ADH208 PAMB 29.4400 RELHUM 66.80

MODEL TEST POINT 0200 0211 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 90.53 M/SEC (297.0 FPS) FREE-JET SPEED

02/15/80 9.180

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X02111

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 64.1 | 66.5 | 67.8 | 67.9 | 69.3 | 70.1 | 70.3 | 71.3 | 76.8 | 83.9 | 86.5 | 88.0 | 78.6 | 161.7 |
| 63 | 65.8 | 68.1 | 68.9 | 69.6 | 70.4 | 71.2 | 72.0 | 73.0 | 79.4 | 85.1 | 86.9 | 88.1 | 76.9 | 162.1 |
| 80 | 66.9 | 68.5 | 70.9 | 72.5 | 72.5 | 72.9 | 73.5 | 74.6 | 81.1 | 86.6 | 86.3 | 86.9 | 75.2 | 161.9 |
| 100 | 65.0 | 70.1 | 71.7 | 72.9 | 72.8 | 74.4 | 74.9 | 76.2 | 83.0 | 86.7 | 85.7 | 84.7 | 73.7 | 161.3 |
| 125 | 69.8 | 69.8 | 72.2 | 73.2 | 73.9 | 75.2 | 75.6 | 77.6 | 82.9 | 86.6 | 87.0 | 82.8 | 72.0 | 161.4 |
| 160 | 71.2 | 70.7 | 73.4 | 75.2 | 75.9 | 76.8 | 76.4 | 78.6 | 83.2 | 86.1 | 85.2 | 80.1 | 70.2 | 160.6 |
| 200 | 70.0 | 73.1 | 75.1 | 74.5 | 75.9 | 77.1 | 77.2 | 78.9 | 83.7 | 86.1 | 84.4 | 78.9 | 69.8 | 160.7 |
| 250 | 71.5 | 72.2 | 74.2 | 74.4 | 75.1 | 76.6 | 77.7 | 79.1 | 83.1 | 86.6 | 84.2 | 78.9 | 69.8 | 161.0 |
| 315 | 70.0 | 71.5 | 74.3 | 75.1 | 76.4 | 76.9 | 78.2 | 79.4 | 83.7 | 85.5 | 84.0 | 80.2 | 70.3 | 161.3 |
| 400 | 70.1 | 72.4 | 74.3 | 75.7 | 76.5 | 77.5 | 78.2 | 80.4 | 83.5 | 84.1 | 83.0 | 78.6 | 69.3 | 161.1 |
| 500 | 70.0 | 72.0 | 74.1 | 75.6 | 76.3 | 77.9 | 77.8 | 79.9 | 82.8 | 84.7 | 83.3 | 79.3 | 70.3 | 161.9 |
| 630 | 71.0 | 72.7 | 74.9 | 75.7 | 76.7 | 77.8 | 78.8 | 80.0 | 82.7 | 84.4 | 82.9 | 79.4 | 70.1 | 162.4 |
| 800 | 70.3 | 72.2 | 74.2 | 75.0 | 76.6 | 78.6 | 78.4 | 80.6 | 83.0 | 83.4 | 82.3 | 78.2 | 69.5 | 162.6 |
| 1000 | 70.1 | 72.2 | 73.9 | 75.6 | 77.3 | 78.5 | 78.1 | 79.7 | 81.6 | 82.7 | 81.2 | 77.9 | 67.8 | 162.6 |
| 1250 | 71.5 | 73.5 | 74.5 | 75.7 | 77.8 | 79.3 | 77.6 | 79.6 | 80.0 | 80.9 | 78.4 | 75.4 | 65.8 | 162.2 |
| 1600 | 68.5 | 71.6 | 74.6 | 74.5 | 76.3 | 77.5 | 76.2 | 77.5 | 78.4 | 79.3 | 75.3 | 72.8 | 62.5 | 161.7 |
| 2000 | 64.5 | 68.7 | 71.9 | 73.9 | 76.5 | 76.7 | 74.6 | 76.0 | 76.8 | 76.0 | 72.3 | 68.9 | 57.8 | 161.4 |
| 2500 | 61.6 | 66.9 | 70.0 | 70.6 | 74.9 | 74.9 | 72.2 | 73.1 | 74.6 | 71.2 | 67.4 | 63.0 | 52.0 | 161.1 |
| 3150 | 52.6 | 60.8 | 64.5 | 65.5 | 70.6 | 70.5 | 67.9 | 67.2 | 69.8 | 67.2 | 61.6 | 53.5 | 39.1 | 160.3 |
| 4000 | 43.6 | 52.9 | 57.1 | 60.2 | 61.7 | 62.5 | 61.9 | 60.6 | 62.8 | 58.7 | 52.4 | 41.2 | 22.4 | 159.9 |
| 5000 | 30.0 | 39.1 | 47.3 | 51.4 | 56.8 | 56.7 | 52.3 | 51.2 | 52.7 | 45.6 | 36.9 | 23.0 | 160.2 | |
| 6300 | 8.9 | 21.0 | 30.9 | 35.5 | 39.2 | 39.8 | 38.1 | 34.6 | 37.1 | 26.6 | 14.0 | | 159.0 | |
| 8000 | | | 1.9 | 9.4 | 13.0 | 14.5 | 14.6 | 9.7 | 10.9 | | | | 158.0 | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

**ORIGINAL PAGE IS
OF POOR QUALITY**

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|-------|-------|-------|------|------|-------|
| OASPL | 81.8 | 83.8 | 85.9 | 86.8 | 88.2 | 89.3 | 89.2 | 90.8 | 94.4 | 97.1 | 96.4 | 94.8 | 84.5 | 175.0 |
| PNL | 88.3 | 91.4 | 94.1 | 95.3 | 97.6 | 98.2 | 97.0 | 98.4 | 100.7 | 101.8 | 100.0 | 96.5 | 86.1 | |
| PNLT | 88.3 | 91.4 | 94.8 | 95.9 | 99.0 | 99.5 | 97.5 | 98.4 | 101.3 | 101.8 | 100.0 | 96.5 | 86.1 | |

DIAMETER RATIO 8.070 FREQUENCY SHIFT -9

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 56.48
 LOCATION C41 ANECH CH AERO. RDG. ADH208 PAMB 29.4400 RELHUM 66.80

MODEL TEST POINT 0211 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 90.53 M/SEC (297.0 FPS) FREE-JET SPEED

02/15/80 9.180

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X02120
BACKGROUND FJB400-FMODL X05220

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

DASPL

99.4

100.7

101.8

103.6

105.9

107.0

110.1

113.6

118.2

118.0

117.8

110.4

155.2

ORIGINAL PAGE 13
OF POOR QUALITY

TEST DATE 03-23-78 TAPE NO. N312 ALPHA SB59 TAMB 55.04
LOCATION C41 ANECH CH AERO. RDG. ADH209 PAMB 29.4400 RELHUM 65.10

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 120.70 M/SEC (396.0 FPS)
O200 O212 SIZE

02/15/80 9.180

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X02120

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 85.1 | 86.9 | 85.3 | 84.9 | 84.4 | 84.1 | 84.4 | 84.9 | 89.4 | 95.4 | 99.5 | 105.7 | 102.4 | 137.5 |
| 315 | 85.1 | 86.9 | 85.2 | 84.9 | 85.9 | 86.2 | 85.0 | 85.6 | 92.1 | 100.6 | 103.9 | 108.5 | 102.9 | 140.4 |
| 400 | 87.0 | 87.6 | 86.9 | 85.6 | 86.1 | 87.3 | 87.1 | 87.8 | 93.9 | 103.1 | 106.1 | 109.1 | 102.3 | 141.7 |
| 500 | 88.4 | 88.2 | 87.7 | 85.8 | 87.3 | 87.5 | 88.0 | 88.4 | 95.8 | 103.5 | 106.2 | 108.2 | 100.6 | 141.5 |
| 630 | 88.2 | 89.0 | 90.0 | 87.3 | 89.6 | 89.5 | 89.0 | 90.6 | 98.2 | 105.4 | 105.9 | 106.2 | 100.3 | 141.4 |
| 800 | 90.5 | 90.7 | 90.5 | 88.3 | 89.7 | 90.8 | 90.3 | 92.5 | 100.1 | 106.1 | 105.3 | 104.4 | 101.5 | 141.5 |
| 1000 | 92.4 | 90.7 | 91.1 | 90.2 | 89.9 | 92.1 | 92.0 | 94.4 | 100.5 | 106.2 | 103.5 | 100.6 | 101.9 | 141.5 |
| 1250 | 93.3 | 91.5 | 92.4 | 90.5 | 92.6 | 93.8 | 93.5 | 95.1 | 101.3 | 105.5 | 105.5 | 102.2 | 100.1 | 141.5 |
| 1600 | 92.8 | 94.5 | 94.2 | 92.5 | 92.9 | 94.2 | 94.6 | 95.9 | 102.2 | 105.9 | 104.4 | 101.9 | 100.8 | 141.7 |
| 2000 | 94.9 | 93.6 | 93.3 | 93.0 | 92.7 | 94.0 | 94.9 | 97.0 | 102.1 | 106.6 | 104.5 | 101.9 | 100.1 | 142.0 |
| 2500 | 93.8 | 93.7 | 94.2 | 92.7 | 94.1 | 95.1 | 96.3 | 97.7 | 103.4 | 105.9 | 104.7 | 102.7 | 100.9 | 142.3 |
| 3150 | 94.1 | 94.3 | 94.7 | 93.7 | 95.1 | 96.5 | 97.0 | 99.4 | 103.3 | 105.8 | 104.4 | 102.5 | 99.9 | 142.4 |
| 4000 | 94.5 | 94.9 | 94.6 | 94.7 | 95.6 | 96.6 | 97.1 | 99.5 | 103.4 | 106.1 | 104.0 | 103.2 | 101.3 | 142.8 |
| 5000 | 96.1 | 96.0 | 96.3 | 94.7 | 95.6 | 97.7 | 98.1 | 100.1 | 103.5 | 105.4 | 104.1 | 104.0 | 102.9 | 143.2 |
| 6300 | 95.8 | 95.9 | 95.6 | 94.8 | 95.7 | 98.0 | 97.8 | 99.4 | 103.2 | 104.8 | 103.9 | 103.7 | 102.7 | 143.1 |
| 8000 | 97.0 | 96.9 | 96.6 | 94.8 | 96.3 | 97.5 | 97.1 | 98.9 | 102.3 | 104.5 | 103.3 | 104.9 | 103.1 | 143.4 |
| 10000 | 97.5 | 98.1 | 97.6 | 95.3 | 97.4 | 98.5 | 96.8 | 98.9 | 101.5 | 103.9 | 102.3 | 104.0 | 103.9 | 143.7 |
| 12500 | 95.9 | 96.6 | 97.1 | 95.5 | 96.4 | 97.3 | 95.9 | 98.2 | 100.6 | 103.6 | 100.7 | 103.5 | 103.5 | 143.8 |
| 16000 | 92.9 | 94.5 | 95.0 | 93.8 | 97.0 | 96.4 | 94.9 | 96.9 | 98.9 | 99.9 | 97.9 | 100.7 | 100.9 | 143.0 |
| 20000 | 93.3 | 94.4 | 95.1 | 93.9 | 95.1 | 94.9 | 93.0 | 94.6 | 95.3 | 94.4 | 92.3 | 95.2 | 97.8 | 142.2 |
| 25000 | 87.9 | 91.2 | 91.4 | 90.4 | 92.7 | 92.2 | 88.8 | 88.3 | 94.8 | 95.0 | 92.4 | 92.9 | 95.8 | 142.2 |
| 31500 | 85.1 | 87.4 | 87.3 | 86.5 | 87.0 | 87.2 | 86.6 | 87.2 | 91.3 | 90.2 | 87.9 | 88.4 | 91.3 | 141.2 |
| 40000 | 79.9 | 80.5 | 82.6 | 83.3 | 86.3 | 85.8 | 82.1 | 82.5 | 85.5 | 82.3 | 81.6 | 82.7 | 85.6 | 140.8 |
| 50000 | 78.4 | 77.8 | 79.7 | 79.3 | 79.3 | 78.6 | 76.6 | 74.9 | 80.7 | 76.0 | 75.1 | 77.0 | 80.8 | 139.8 |
| 63000 | 71.7 | 72.8 | 72.1 | 72.8 | 71.6 | 71.9 | 72.2 | 68.3 | 78.2 | 73.3 | 73.2 | 71.9 | 76.4 | 140.1 |
| 80000 | 63.2 | 65.6 | 64.3 | 64.9 | 66.7 | 67.4 | 65.5 | 64.8 | 68.4 | 63.4 | 63.4 | 62.1 | 66.6 | 139.2 |
| OASPL | 106.8 | 107.1 | 107.2 | 105.8 | 107.2 | 108.2 | 107.8 | 109.7 | 114.0 | 117.6 | 117.2 | 117.8 | 114.7 | 156.1 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 396.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | O3-23-78 | TAPE NO. | N312 | ALPHA | SB59 | TAM3 | 55.04 |
|-----------|---|------------|---|-------|--|--------|-------|
| LOCATION | C41 ANECH CH <th>AERO. RDG.</th> <td>ADH209 <th>PAMB</th> <td>29.4400 <th>RELHUM</th> <td>65.10</td> </td></td> | AERO. RDG. | ADH209 <th>PAMB</th> <td>29.4400 <th>RELHUM</th> <td>65.10</td> </td> | PAMB | 29.4400 <th>RELHUM</th> <td>65.10</td> | RELHUM | 65.10 |

| MODEL | TEST POINT | ACOUSTIC RANGE | 12.2 M (40.0 FT) | ARC | 138.7 SQ CM (21.49 SQ IN) | MODEL | 120.70 M/SEC (396.0 FPS) |
|-------|------------|----------------|-------------------|-----|----------------------------|-------|---------------------------|
| O200 | O212 | | | | | | |

02/15/80 9.180

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X02121

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 50 | 65.7 | 67.8 | 68.2 | 67.6 | 68.5 | 69.9 | 69.6 | 69.8 | 75.2 | 83.4 | 84.8 | 85.6 | 75.4 | 159.8 |
| 63 | 67.0 | 68.4 | 69.0 | 67.8 | 69.7 | 70.0 | 70.4 | 70.4 | 77.1 | 83.7 | 84.9 | 84.7 | 73.7 | 159.6 |
| 80 | 66.9 | 69.2 | 71.3 | 69.2 | 72.0 | 72.0 | 71.4 | 72.5 | 79.4 | 85.5 | 84.6 | 82.6 | 73.3 | 159.5 |
| 100 | 69.0 | 70.8 | 71.7 | 70.2 | 72.0 | 73.3 | 72.6 | 74.4 | 81.3 | 86.2 | 83.9 | 80.7 | 74.3 | 159.6 |
| 125 | 70.8 | 70.7 | 72.2 | 72.0 | 72.1 | 74.5 | 74.3 | 76.2 | 81.6 | 86.2 | 85.2 | 79.7 | 73.2 | 160.1 |
| 160 | 71.6 | 71.3 | 73.4 | 72.3 | 74.8 | 76.1 | 75.6 | 76.8 | 82.3 | 85.4 | 83.7 | 78.1 | 72.3 | 159.6 |
| 200 | 70.8 | 74.1 | 74.9 | 74.1 | 74.9 | 76.3 | 76.6 | 77.4 | 83.0 | 85.6 | 82.4 | 77.5 | 72.5 | 159.8 |
| 250 | 72.5 | 73.0 | 73.9 | 74.3 | 74.5 | 75.9 | 76.7 | 78.3 | 82.7 | 86.0 | 82.2 | 77.1 | 71.3 | 160.1 |
| 315 | 71.0 | 72.7 | 74.5 | 73.7 | 75.6 | 76.8 | 77.8 | 78.7 | 83.7 | 85.0 | 81.9 | 77.3 | 71.2 | 160.4 |
| 400 | 70.8 | 73.0 | 74.6 | 74.5 | 76.3 | 77.9 | 78.2 | 80.1 | 83.2 | 84.4 | 81.1 | 76.4 | 69.2 | 160.6 |
| 500 | 70.8 | 73.1 | 74.1 | 75.1 | 76.5 | 77.7 | 78.0 | 80.0 | 83.0 | 84.4 | 80.3 | 76.5 | 69.6 | 160.9 |
| 630 | 71.8 | 73.9 | 75.6 | 74.9 | 76.3 | 78.5 | 78.8 | 80.3 | 82.7 | 83.3 | 79.9 | 76.6 | 70.2 | 161.3 |
| 800 | 71.1 | 73.4 | 74.5 | 74.7 | 76.1 | 78.6 | 78.2 | 79.3 | 82.2 | 82.3 | 79.2 | 75.6 | 68.8 | 161.2 |
| 1000 | 71.9 | 74.1 | 75.3 | 74.5 | 76.6 | 77.9 | 77.3 | 78.6 | 81.0 | 81.7 | 78.1 | 76.2 | 68.1 | 161.5 |
| 1250 | 71.8 | 74.9 | 76.1 | 74.8 | 77.5 | 78.8 | 76.9 | 78.4 | 80.0 | 80.7 | 76.6 | 74.5 | 67.4 | 161.9 |
| 1600 | 69.3 | 72.9 | 75.2 | 74.7 | 76.3 | 77.3 | 75.7 | 77.4 | 78.6 | 79.8 | 74.2 | 72.6 | 64.6 | 161.9 |
| 2000 | 65.4 | 70.2 | 72.7 | 72.8 | 76.7 | 76.3 | 74.6 | 75.8 | 76.6 | 75.6 | 70.3 | 68.1 | 59.0 | 161.2 |
| 2500 | 64.0 | 68.8 | 71.9 | 72.2 | 74.3 | 74.2 | 72.1 | 72.9 | 72.1 | 68.8 | 63.0 | 59.8 | 51.0 | 160.3 |
| 3150 | 55.2 | 63.2 | 66.3 | 67.2 | 70.5 | 70.3 | 66.5 | 65.0 | 69.7 | 67.0 | 59.7 | 52.5 | 40.7 | 160.3 |
| 4000 | 46.2 | 54.7 | 58.4 | 60.0 | 61.8 | 62.4 | 61.4 | 60.6 | 62.4 | 57.4 | 49.0 | 39.1 | 21.7 | 159.4 |
| 5000 | 31.2 | 40.2 | 47.4 | 51.3 | 56.1 | 56.2 | 51.9 | 50.5 | 50.3 | 42.0 | 32.9 | 19.7 | 158.9 | |
| 6300 | 11.9 | 23.2 | 32.5 | 36.6 | 39.0 | 39.1 | 36.3 | 32.1 | 33.5 | 21.5 | 8.7 | 158.2 | 157.4 | |
| 8000 | | | 3.5 | 10.8 | 13.2 | 14.6 | 13.8 | 6.4 | 9.7 | | | | | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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OASPL 82.8 84.9 86.3 85.9 87.7 89.0 88.6 90.0 93.7 96.4 94.4 91.9 83.8 174.0

PNL 89.4 92.7 95.0 95.1 97.3 97.8 96.6 97.6 100.2 101.5 97.8 94.4 86.5

PNLT 89.4 92.7 95.8 95.7 98.5 99.0 96.6 97.8 100.2 101.5 97.8 94.4 86.5

DIAMETER RATIO 8.070 FREQUENCY SHIFT -9

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 55.04
LOCATION C41 ANECH CH AERO. RDG. ADH203 PAMB 29.4400 RELHUM 65.10

MODEL TEST POINT 0212 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 120.70 M/SEC (396.0 FPS) FREE-JET SPEED

02/15/80 9.180

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FU-ZER-FMODL X02130
BACKGROUND 0000000000 000000

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ
50
63
80
100
125
160
200

250 85.5 91.3 90.6 90.1 91.0 93.1 95.5 97.6 100.6 107.4 112.0 117.7 115.1 149.6
315 87.4 89.4 89.9 91.0 93.3 95.7 96.1 97.7 102.4 110.0 113.9 119.8 115.5 151.3
400 89.2 91.2 92.0 91.2 93.1 95.0 96.8 98.5 103.7 113.5 116.9 121.1 116.0 153.1
500 90.0 92.5 93.5 93.1 94.2 96.5 97.7 99.3 105.0 115.6 119.0 121.9 116.3 154.4
630 91.6 93.6 94.4 94.2 95.5 97.9 99.8 102.4 107.4 116.7 120.1 122.8 118.2 155.5
800 95.3 94.4 96.2 96.2 97.3 99.6 100.3 103.4 108.9 117.0 120.9 123.5 118.2 156.2
1000 100.2 100.5 101.2 98.8 98.6 100.7 102.1 104.8 110.7 117.6 120.9 123.4 118.3 156.4
1250 97.3 101.3 102.3 101.9 102.2 103.3 103.2 106.1 111.1 116.6 122.0 123.7 117.4 156.7
1600 98.6 97.7 99.4 99.2 100.8 103.2 103.6 106.7 111.7 117.0 122.0 122.7 116.0 156.4
2000 99.5 100.5 100.5 99.3 99.6 102.0 103.6 107.0 112.5 117.3 121.0 119.8 113.3 155.2
2500 99.8 100.3 101.1 100.9 101.5 102.6 104.7 107.1 112.1 118.2 120.1 118.1 111.6 154.7
3150 102.1 102.1 101.1 100.6 101.2 103.1 104.5 107.9 112.8 117.2 118.4 116.6 110.1 153.7
4000 102.9 103.1 102.9 101.4 101.3 102.9 104.3 108.2 111.9 116.3 116.7 114.9 108.4 152.7
5000 100.5 102.6 103.1 103.3 102.7 103.3 105.2 108.3 111.3 116.7 116.4 113.3 107.8 152.7
6300 98.4 101.0 101.5 102.5 103.7 104.8 105.3 108.0 111.3 115.3 114.9 112.5 107.7 152.0
8000 98.0 100.6 101.2 101.3 103.1 104.8 104.8 107.2 110.9 114.0 113.5 111.7 106.7 151.5
10000 95.2 99.7 101.0 100.9 103.2 105.6 104.2 107.1 109.6 113.5 112.1 110.9 105.7 151.3
12500 92.5 97.4 99.0 100.2 101.7 103.4 103.3 105.7 107.1 111.4 109.7 108.3 103.0 150.1
16000 90.3 95.7 97.7 98.5 101.3 103.0 101.7 104.4 106.1 110.3 107.8 106.6 101.5 150.1
20000 84.8 93.1 94.4 96.0 100.2 101.5 99.1 101.6 103.8 106.9 105.5 103.9 99.3 149.3
25000 83.2 90.0 91.3 92.0 97.7 98.6 95.9 96.8 101.6 103.2 102.8 100.2 96.7 148.5
31500 81.7 85.6 89.2 90.7 91.9 92.9 92.6 94.2 98.5 102.9 99.5 96.0 91.9 148.9
40000 76.9 80.8 84.4 85.3 90.2 91.4 87.8 89.6 94.9 98.5 96.3 91.1 87.3 149.1
50000 70.5 76.6 77.2 80.0 82.6 84.2 83.2 83.6 90.0 94.4 91.8 87.6 82.7 148.6
63000 64.6 71.3 71.7 73.8 74.5 76.6 78.0 77.5 86.8 89.6 86.5 82.2 77.2 149.1
80000 58.8 64.9 66.0 69.1 68.1 70.9 70.3 72.2 82.0 84.6 82.0 75.3 70.7 150.8

OASPL 110.6 112.1 112.7 112.6 113.7 115.3 115.8 118.7 122.8 128.5 131.2 132.6 127.2 167.2

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 54.50
LOCATION C41 ANECH CH AERO. RDG. ADH189 PAMB 29.4000 RELHUM 61.80

MODEL TEST POINT 0200 0213 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 38.7 SQ CM (21.49 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

23
50

02/15/80 9.180

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X02130

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

160

200

250 85.5 91.3 90.6 90.1 91.0 93.1 95.5 97.6 100.6 107.4 112.0 117.7 115.1 149.6

315 87.4 89.4 89.9 91.0 93.3 95.7 96.1 97.7 102.4 110.0 113.9 119.8 115.5 151.3

400 89.2 91.2 92.0 91.2 93.1 95.0 96.8 98.5 103.7 113.5 116.9 121.1 116.0 153.1

500 90.0 92.5 93.5 93.1 94.2 96.5 97.7 99.3 105.0 115.6 119.0 121.9 116.3 154.4

630 91.6 93.6 94.4 94.2 95.5 97.9 99.8 102.4 107.4 116.7 120.1 122.8 118.2 155.5

800 95.3 94.4 96.2 96.2 97.3 99.6 100.3 103.4 108.9 117.0 120.9 123.5 118.2 156.2

1000 100.2 100.5 101.2 98.8 98.6 100.7 102.1 104.8 110.7 117.6 120.9 123.4 118.3 156.4

1250 97.3 101.3 102.3 101.9 102.2 103.3 103.2 106.1 111.1 116.6 122.0 123.7 117.4 156.7

1600 98.6 97.7 99.4 99.2 100.8 103.2 103.6 106.7 111.7 117.0 122.0 122.7 116.0 156.4

2000 99.5 100.5 100.5 99.3 99.6 102.0 103.5 107.0 112.5 117.3 121.0 119.8 113.3 155.2

2500 99.8 100.3 101.1 100.9 101.5 102.6 104.7 107.1 112.1 118.2 120.1 118.1 111.6 154.7

3150 102.1 102.1 101.1 100.6 101.2 103.1 104.5 107.9 112.8 117.2 118.4 116.6 110.1 153.7

4000 102.9 103.1 102.9 101.4 101.5 102.9 104.3 108.2 111.9 116.3 116.7 114.9 108.4 152.7

5000 100.5 102.6 103.1 103.3 102.7 103.3 105.2 108.3 111.3 116.7 116.4 113.3 107.8 152.7

6300 98.4 101.0 101.5 102.5 103.7 104.8 105.3 108.0 111.3 115.3 114.9 112.5 107.7 152.0

8000 98.0 100.6 101.2 101.3 103.1 104.8 105.8 107.2 110.9 114.0 113.5 111.7 106.7 151.5

10000 95.2 99.7 101.0 100.9 103.2 105.6 104.2 107.1 109.6 113.5 112.1 110.9 105.7 151.3

12500 92.5 97.4 99.0 100.2 101.7 103.4 103.3 105.7 107.1 111.4 109.7 108.3 103.0 150.0

16000 90.3 95.7 97.7 98.9 101.3 103.0 101.7 104.4 106.1 110.3 107.8 106.6 101.5 150.1

20000 84.8 93.1 94.4 96.0 100.2 101.5 99.1 101.6 103.8 106.9 105.5 103.9 99.3 149.3

25000 83.2 90.0 91.3 92.0 97.7 98.8 95.9 96.8 101.6 103.2 102.8 100.2 96.7 148.5

31500 81.7 85.6 89.2 90.7 91.9 92.9 92.6 94.2 98.5 102.9 99.5 96.0 91.9 148.9

40000 76.9 80.8 84.4 85.3 90.2 91.4 87.8 89.6 94.9 98.5 96.3 91.1 87.3 149.1

50000 70.5 76.6 77.2 80.0 82.6 84.2 83.3 83.6 90.0 94.4 91.8 87.6 82.7 148.6

63000 64.6 71.3 71.7 73.8 74.5 76.6 78.0 77.5 86.8 89.6 86.5 82.2 77.2 149.1

80000 58.8 64.9 66.0 69.1 68.1 70.9 70.3 72.2 82.0 84.6 82.0 75.3 70.7 150.8

OASPL 110.6 112.1 112.7 112.6 113.7 115.3 115.8 118.7 122.8 128.5 131.2 132.6 127.2 167.2

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-23-78 TAPE NO. N312 ALPHA SB59 TAMB 54.50
LOCATION C41 ANECH CH AERO. RDG. ADH189 PAMB 29.4000 RELHUM 61.80

MODEL TEST POINT 0200 ACQUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (O. FPS)

02/15/80 9.180

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X02131

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|-------|------|-------|-------|
| 50 | 67.9 | 71.4 | 73.3 | 73.3 | 75.5 | 77.5 | 79.3 | 80.5 | 85.0 | 93.8 | 95.6 | 97.6 | 89.2 | 171.3 |
| 63 | 68.6 | 72.7 | 74.8 | 75.1 | 76.6 | 79.1 | 80.1 | 81.3 | 86.3 | 95.8 | 97.7 | 98.4 | 89.4 | 172.6 |
| 80 | 70.2 | 73.8 | 75.6 | 76.1 | 77.9 | 80.4 | 82.1 | 84.4 | 88.6 | 96.9 | 98.7 | 99.2 | 91.2 | 173.7 |
| 100 | 73.9 | 74.5 | 77.3 | 78.1 | 79.6 | 82.1 | 82.6 | 85.4 | 90.1 | 97.1 | 99.4 | 99.8 | 91.0 | 174.3 |
| 125 | 78.6 | 80.5 | 82.3 | 80.6 | 80.9 | 83.1 | 84.4 | 86.6 | 91.8 | 97.6 | 99.4 | 99.5 | 90.9 | 174.5 |
| 160 | 75.5 | 81.1 | 83.3 | 83.6 | 84.3 | 85.6 | 85.3 | 87.8 | 92.0 | 96.5 | 100.2 | 99.6 | 89.6 | 174.9 |
| 200 | 76.6 | 77.3 | 80.2 | 80.8 | 82.8 | 85.3 | 85.5 | 88.3 | 92.5 | 96.6 | 100.0 | 98.3 | 87.7 | 174.5 |
| 250 | 77.1 | 79.8 | 81.0 | 80.6 | 81.4 | 83.9 | 85.4 | 88.3 | 93.0 | 96.7 | 98.7 | 94.9 | 84.4 | 173.3 |
| 315 | 77.1 | 79.4 | 81.3 | 81.9 | 83.0 | 84.2 | 86.2 | 88.2 | 92.3 | 97.2 | 97.4 | 92.7 | 81.9 | 172.8 |
| 400 | 78.8 | 80.7 | 81.0 | 81.4 | 82.4 | 84.4 | 85.7 | 88.6 | 92.7 | 95.8 | 95.1 | 90.5 | 79.4 | 171.9 |
| 500 | 79.1 | 81.4 | 82.5 | 81.9 | 82.2 | 84.0 | 85.2 | 88.6 | 91.5 | 94.5 | 93.0 | 88.2 | 76.7 | 170.9 |
| 630 | 76.3 | 80.4 | 82.3 | 83.5 | 83.3 | 84.1 | 85.8 | 88.5 | 90.6 | 94.5 | 92.1 | 85.9 | 75.1 | 170.8 |
| 800 | 73.6 | 78.4 | 80.4 | 82.3 | 84.1 | 85.4 | 85.7 | 87.8 | 90.3 | 92.8 | 90.2 | 84.4 | 73.8 | 170.2 |
| 1000 | 72.8 | 77.8 | 79.9 | 81.0 | 83.4 | 85.2 | 85.1 | 86.9 | 89.6 | 91.2 | 88.4 | 83.0 | 71.7 | 169.6 |
| 1250 | 69.5 | 75.5 | 79.5 | 80.4 | 83.3 | 85.9 | 84.4 | 86.6 | 88.1 | 90.3 | 86.4 | 81.3 | 69.3 | 169.4 |
| 1600 | 66.0 | 73.6 | 77.0 | 79.4 | 81.6 | 83.4 | 83.2 | 84.9 | 85.2 | 87.6 | 83.1 | 77.4 | 64.2 | 168.2 |
| 2000 | 62.8 | 71.3 | 75.4 | 77.9 | 80.9 | 82.9 | 81.4 | 83.4 | 83.8 | 85.9 | 80.3 | 74.0 | 59.6 | 168.2 |
| 2500 | 55.5 | 67.5 | 71.2 | 74.3 | 79.3 | 80.9 | 78.3 | 79.9 | 80.6 | 81.3 | 76.2 | 68.6 | 52.6 | 167.4 |
| 3150 | 50.5 | 62.0 | 66.2 | 68.8 | 75.4 | 76.9 | 73.6 | 73.6 | 76.5 | 75.2 | 70.1 | 59.9 | 41.5 | 166.6 |
| 4000 | 42.8 | 52.8 | 60.3 | 64.1 | 66.7 | 68.1 | 67.4 | 67.6 | 69.6 | 70.1 | 60.6 | 46.8 | 22.3 | 167.1 |
| 5000 | 28.3 | 40.4 | 49.3 | 53.3 | 60.0 | 61.7 | 57.6 | 57.6 | 59.8 | 58.2 | 47.6 | 28.1 | 167.2 | |
| 6300 | 4.1 | 22.0 | 30.0 | 37.3 | 42.3 | 44.7 | 43.0 | 40.9 | 42.8 | 39.8 | 25.3 | 0.5 | 166.8 | |
| 8000 | | | 3.1 | 11.8 | 16.1 | 19.3 | 19.5 | 15.5 | 18.3 | 10.2 | | | 167.2 | |
| 10000 | | | | | | | | | | | | | 169.0 | |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| OASPL | 87.5 | 90.6 | 92.5 | 93.0 | 94.5 | 96.3 | 96.8 | 99.2 | 102.8 | 107.5 | 108.9 | 108.0 | 98.8 | 185.2 |
| PNL | 92.4 | 96.4 | 98.8 | 100.4 | 103.0 | 104.8 | 104.2 | 106.2 | 108.8 | 112.3 | 111.9 | 109.1 | 98.6 | |
| PNLT | 93.5 | 96.4 | 98.8 | 100.9 | 104.2 | 106.0 | 104.2 | 106.2 | 108.8 | 112.9 | 112.9 | 109.1 | 98.6 | |

DIAMETER RATIO 8.070 FREQUENCY SHIFT -9

TEST DATE 03-23-78 TAPE NO. N312 ALPHA SB59 TAMB 54.50
LOCATION C41 ANECH CH AERO. RDG. ADH189 PAMB 29.4000 RELHJM 61.80

MODEL TEST POINT 0213 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE FREE-JET SPEED
O200 0. M/SEC (O. FPS)

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X02140
BACKGROUND FJB300-FMODL X05230

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 82.5 | 87.1 | 86.6 | 87.6 | 88.0 | 89.6 | 92.5 | 94.9 | 96.8 | 103.6 | 109.3 | 116.0 | 112.6 | 147.3 |
| 315 | 84.4 | 86.1 | 86.9 | 87.5 | 89.6 | 91.9 | 92.6 | 94.5 | 99.2 | 106.7 | 111.1 | 117.3 | 113.2 | 148.7 |
| 400 | 86.4 | 87.2 | 88.7 | 87.7 | 90.3 | 92.2 | 93.1 | 95.2 | 100.2 | 110.5 | 113.7 | 118.8 | 112.3 | 150.4 |
| 500 | 86.4 | 87.8 | 90.3 | 89.8 | 90.7 | 92.8 | 94.4 | 96.6 | 101.5 | 112.6 | 116.5 | 119.4 | 111.3 | 151.7 |
| 630 | 86.7 | 89.1 | 90.9 | 90.7 | 92.5 | 94.6 | 95.5 | 98.9 | 103.6 | 113.2 | 117.3 | 119.3 | 109.2 | 152.0 |
| 800 | 91.1 | 89.4 | 91.1 | 92.2 | 93.5 | 95.4 | 97.0 | 100.4 | 106.1 | 114.5 | 117.9 | 119.0 | 106.7 | 152.3 |
| 1000 | 93.2 | 92.2 | 93.7 | 93.3 | 94.6 | 96.7 | 98.6 | 101.8 | 107.7 | 114.5 | 118.2 | 117.9 | 105.3 | 152.2 |
| 1250 | 91.3 | 94.3 | 96.1 | 95.4 | 96.7 | 98.8 | 99.4 | 103.1 | 107.8 | 114.4 | 119.0 | 117.7 | 104.1 | 152.5 |
| 1600 | 92.6 | 92.4 | 94.4 | 95.0 | 96.8 | 99.2 | 100.8 | 103.5 | 109.2 | 114.7 | 119.7 | 117.2 | 103.7 | 152.9 |
| 2000 | 93.5 | 93.7 | 95.0 | 94.8 | 95.8 | 98.2 | 99.8 | 104.8 | 110.2 | 115.3 | 119.0 | 116.0 | 103.8 | 152.6 |
| 2500 | 95.1 | 96.3 | 97.3 | 95.9 | 97.2 | 99.6 | 101.5 | 105.1 | 110.1 | 116.7 | 118.9 | 115.6 | 103.6 | 152.9 |
| 3150 | 98.6 | 98.6 | 98.1 | 98.1 | 97.7 | 99.8 | 101.7 | 106.1 | 110.8 | 115.9 | 117.9 | 113.8 | 101.8 | 152.2 |
| 4000 | 99.8 | 100.4 | 101.4 | 98.4 | 99.0 | 100.4 | 102.0 | 105.7 | 110.4 | 115.2 | 115.7 | 111.4 | 100.4 | 151.1 |
| 5000 | 98.0 | 99.8 | 101.5 | 100.5 | 100.4 | 101.2 | 102.6 | 105.8 | 109.8 | 115.4 | 114.3 | 110.0 | 98.8 | 150.8 |
| 6300 | 96.6 | 97.9 | 99.7 | 100.2 | 101.4 | 102.5 | 103.0 | 105.2 | 110.3 | 114.0 | 112.3 | 107.9 | 98.6 | 149.9 |
| 8000 | 96.9 | 98.0 | 99.1 | 99.0 | 100.6 | 102.5 | 103.0 | 105.1 | 109.6 | 112.9 | 111.5 | 106.9 | 97.4 | 149.5 |
| 10000 | 95.1 | 97.0 | 98.9 | 99.0 | 100.6 | 102.5 | 102.4 | 105.4 | 108.7 | 112.4 | 109.5 | 106.0 | 96.6 | 149.3 |
| 12500 | 92.4 | 94.9 | 97.1 | 98.1 | 99.8 | 101.0 | 101.2 | 103.3 | 107.0 | 110.0 | 108.0 | 104.4 | 95.4 | 148.3 |
| 16000 | 90.6 | 93.2 | 96.0 | 97.2 | 99.8 | 101.0 | 99.7 | 102.4 | 105.1 | 109.0 | 105.5 | 102.4 | 94.3 | 148.3 |
| 20000 | 85.7 | 90.5 | 92.6 | 94.0 | 98.1 | 98.9 | 96.9 | 99.6 | 102.8 | 105.3 | 103.2 | 99.9 | 91.8 | 147.2 |
| 25000 | 83.9 | 87.9 | 89.7 | 89.7 | 95.1 | 95.9 | 93.6 | 94.2 | 99.8 | 101.3 | 99.7 | 95.9 | 90.9 | 146.0 |
| 31500 | 81.8 | 83.4 | 86.8 | 88.8 | 89.8 | 90.5 | 90.0 | 91.8 | 95.9 | 98.4 | 96.8 | 91.2 | 85.3 | 145.6 |
| 40000 | 77.8 | 78.3 | 82.0 | 83.1 | 88.6 | 88.5 | 85.1 | 86.7 | 91.7 | 93.8 | 92.4 | 86.2 | 81.9 | 145.5 |
| 50000 | 70.9 | 73.6 | 75.5 | 77.1 | 79.9 | 81.6 | 80.4 | 80.4 | 87.5 | 87.9 | 88.1 | 80.4 | 75.3 | 144.4 |
| 60000 | 65.4 | 69.1 | 69.5 | 70.9 | 72.3 | 72.4 | 74.3 | 73.8 | 82.6 | 82.3 | 82.0 | 74.0 | 69.8 | 143.8 |
| 80000 | 59.8 | 61.7 | 63.0 | 65.7 | 65.0 | 67.3 | 66.4 | 67.8 | 77.0 | 77.8 | 76.1 | 65.4 | 62.3 | 145.0 |
| DASPL | 107.3 | 108.4 | 109.8 | 109.5 | 110.8 | 112.4 | 113.1 | 116.2 | 120.9 | 126.5 | 128.9 | 128.7 | 120.1 | 164.3 |

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| TEST DATE | 03-23-78 | TAPE NO. | N312 | ALPHA | SB59 | TAMB | 48.38 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERD. RDG. | ADH204 | PAMB | 29.4300 | RELHUM | 79.70 |

| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
|-------|------------|-----------------------|------------------------------------|--------------------------|
| 0200 | 0214 | 12.2 M (40.0 FT) ARC | 138.7 SQ CM (21.49 SQ IN) - MODEL | 90.22 M/SEC (296.0 FPS) |

02/15/80 9.180

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X02140

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 296.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-23-78 TAPE NO. N312 ALPHA SB59 TAMB 48.38
LOCATION C41 ANECH CH AERO. RDG. ADH204 PAMB 29.4300 RELHUM 79.70

MODEL TEST POINT 0214 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 90.22 M/SEC (296.0 FPS) FREE-JET SPEED SIZE

02/15/80 9.180

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X02141

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 68.6 | 71.0 | 71.8 | 72.2 | 74.1 | 74.9 | 74.8 | 75.7 | 81.5 | 91.1 | 93.3 | 95.0 | 86.1 | 168.7 |
| 63 | 70.6 | 72.0 | 73.6 | 74.3 | 74.4 | 75.5 | 76.2 | 77.2 | 83.9 | 92.1 | 94.8 | 96.0 | 85.9 | 169.8 |
| 80 | 70.6 | 72.6 | 75.1 | 75.2 | 76.3 | 77.4 | 77.3 | 79.6 | 86.5 | 93.5 | 95.7 | 96.7 | 85.4 | 170.7 |
| 100 | 70.8 | 73.9 | 75.7 | 76.6 | 77.3 | 78.1 | 78.7 | 80.9 | 88.2 | 93.8 | 96.4 | 96.3 | 85.7 | 170.9 |
| 125 | 74.9 | 73.9 | 75.9 | 77.4 | 78.2 | 79.5 | 80.3 | 82.2 | 88.1 | 93.5 | 97.0 | 96.0 | 84.3 | 171.1 |
| 160 | 75.9 | 76.0 | 77.9 | 79.7 | 80.4 | 81.5 | 81.0 | 83.4 | 89.4 | 93.7 | 97.5 | 95.2 | 83.6 | 171.3 |
| 200 | 74.8 | 78.6 | 80.6 | 79.2 | 80.4 | 81.8 | 82.3 | 83.6 | 90.3 | 94.1 | 96.6 | 93.8 | 83.3 | 171.0 |
| 250 | 75.7 | 76.5 | 78.7 | 78.8 | 79.4 | 80.8 | 81.3 | 84.8 | 90.1 | 95.3 | 96.3 | 93.0 | 82.6 | 171.2 |
| 315 | 75.9 | 77.3 | 78.9 | 79.6 | 80.5 | 82.1 | 82.8 | 85.0 | 90.7 | 94.4 | 95.0 | 90.8 | 80.1 | 170.5 |
| 400 | 76.5 | 79.1 | 80.7 | 81.1 | 80.6 | 82.3 | 82.9 | 85.9 | 90.3 | 93.6 | 92.5 | 87.9 | 77.8 | 169.5 |
| 500 | 78.4 | 80.0 | 80.3 | 81.3 | 81.9 | 82.9 | 83.3 | 85.5 | 89.7 | 93.7 | 91.0 | 86.0 | 75.1 | 169.3 |
| 630 | 79.4 | 81.6 | 83.5 | 83.9 | 83.5 | 83.8 | 84.0 | 85.6 | 90.5 | 92.5 | 89.1 | 83.9 | 74.4 | 169.2 |
| 800 | 77.7 | 81.4 | 84.1 | 83.8 | 84.8 | 85.3 | 84.6 | 85.2 | 90.0 | 91.5 | 88.1 | 82.3 | 72.2 | 169.2 |
| 1000 | 76.6 | 79.7 | 82.4 | 82.8 | 84.3 | 85.7 | 85.1 | 85.6 | 89.1 | 90.8 | 85.8 | 80.9 | 70.4 | 168.9 |
| 1250 | 76.2 | 79.5 | 81.7 | 82.7 | 84.3 | 85.8 | 84.3 | 85.7 | 87.4 | 88.3 | 84.1 | 78.9 | 68.1 | 168.4 |
| 1600 | 73.3 | 77.7 | 80.9 | 82.3 | 83.7 | 84.0 | 82.9 | 83.3 | 85.5 | 87.3 | 81.3 | 75.9 | 65.1 | 168.1 |
| 2000 | 71.0 | 76.1 | 79.4 | 81.2 | 83.5 | 83.9 | 81.3 | 82.1 | 83.4 | 83.5 | 78.6 | 72.5 | 60.6 | 167.9 |
| 2500 | 67.1 | 72.7 | 77.0 | 77.3 | 81.3 | 81.3 | 77.9 | 78.7 | 80.5 | 79.4 | 74.4 | 67.1 | 56.3 | 167.4 |
| 3150 | 58.2 | 66.9 | 71.1 | 71.4 | 76.9 | 77.0 | 73.5 | 72.1 | 75.1 | 74.2 | 68.2 | 57.1 | 41.7 | 166.2 |
| 4000 | 49.3 | 58.8 | 63.6 | 67.3 | 68.6 | 68.7 | 66.6 | 66.0 | 68.1 | 66.0 | 58.7 | 43.5 | 25.4 | 165.8 |
| 5000 | 36.7 | 45.9 | 53.7 | 56.2 | 62.4 | 61.8 | 57.0 | 55.6 | 57.9 | 52.7 | 44.7 | 24.9 | | 165.6 |
| 6300 | 14.5 | 26.2 | 36.3 | 39.4 | 43.6 | 45.0 | 41.9 | 38.4 | 41.9 | 33.8 | 21.8 | | 164.5 | |
| 8000 | | | 7.6 | 13.1 | 17.5 | 18.1 | 17.7 | 12.5 | 16.4 | 6.0 | | | 164.7 | |
| 10000 | | | | | | | | | | | | | 162.6 | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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| | | | | | | | | | | | | | | |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| OASPL | 87.8 | 90.3 | 92.5 | 93.1 | 94.2 | 95.1 | 94.6 | 96.2 | 101.0 | 105.0 | 106.2 | 104.9 | 94.3 | 182.8 |
| PNL | 94.1 | 97.9 | 100.8 | 102.0 | 103.9 | 104.6 | 102.9 | 104.1 | 107.4 | 110.0 | 109.3 | 105.9 | 95.1 | |
| PNLT | 95.2 | 97.9 | 101.4 | 102.5 | 105.3 | 105.7 | 103.5 | 104.1 | 107.9 | 110.5 | 109.3 | 105.9 | 96.3 | |

DIAMETER RATIO 8.070 FREQUENCY SHIFT -9

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB55 TAMB 48.38
LOCATION C41 ANECH CH AERO. RDG. ADH204 PAMB 29.4300 RELHUM 79.70

MODEL TEST POINT 0214 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE FREE-JET SPEED 90.22 M/SEC (296.0 FPS)

02/15/80 9.180

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARCIDENTIFICATION - MODEL FJ-400-FMOOL X02150
BACKGROUND FJ-400-FMOOL X05220

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. FWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

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OF POOR QUALITYTEST DATE 03-23-78 TAPE NO. N312 IALPHA S859 TAMB 56.66
LOCATION C41 ANECH CH AERO. PDS. ADH205 PANS 29.4300 RELHUM 70.30

MODEL TEST POINT 0215 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SO CM (21.49 SO IN) - MODEL 120.70 M/SEC (396.0 FPS) FREE-JET SPEED

245

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X02150

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

OASPL

113.5

114.0

113.9

112.9

113.6

114.4

113.6

115.7

121.0

125.4

127.0

127.4

123.4

164.2

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 396.00 REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 56.66
 LOCATION C41 ANECH CH AERO. RDG. ADH205 PAMB 29.4300 RELHUM 70.30

MODEL TEST POINT 0215 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 120.70 M/SEC (396.0 FPS) FREE-JET SPEED

02/15/80 9.180

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X02151

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 70.1 | 72.4 | 72.3 | 71.8 | 72.6 | 73.7 | 73.4 | 74.1 | 80.3 | 89.6 | 91.7 | 92.8 | 83.6 | 166.8 |
| 63 | 70.9 | 72.6 | 73.3 | 72.2 | 74.1 | 75.1 | 75.1 | 75.4 | 83.1 | 90.5 | 93.6 | 93.1 | 82.8 | 167.7 |
| 80 | 72.0 | 73.5 | 75.2 | 73.7 | 75.5 | 76.5 | 76.3 | 78.0 | 85.4 | 91.9 | 94.2 | 93.5 | 83.0 | 168.4 |
| 100 | 72.4 | 75.1 | 76.3 | 74.5 | 76.9 | 77.8 | 77.6 | 79.7 | 87.6 | 92.7 | 94.7 | 93.6 | 84.3 | 169.1 |
| 125 | 75.3 | 75.5 | 77.0 | 76.5 | 78.0 | 79.0 | 79.2 | 80.8 | 87.8 | 92.6 | 95.3 | 91.9 | 84.0 | 169.0 |
| 160 | 76.3 | 76.9 | 77.7 | 77.3 | 79.3 | 80.4 | 80.3 | 82.1 | 88.2 | 92.3 | 95.6 | 92.2 | 83.5 | 169.4 |
| 200 | 76.1 | 78.9 | 80.7 | 79.1 | 80.2 | 81.3 | 81.4 | 83.2 | 90.0 | 93.5 | 94.6 | 91.4 | 84.5 | 169.5 |
| 250 | 77.0 | 77.5 | 78.9 | 78.9 | 79.0 | 80.6 | 81.3 | 83.9 | 89.6 | 94.9 | 94.6 | 91.6 | 84.0 | 170.2 |
| 315 | 76.8 | 77.7 | 79.0 | 78.5 | 80.2 | 81.6 | 82.5 | 84.7 | 91.1 | 93.8 | 93.8 | 90.6 | 83.3 | 170.1 |
| 400 | 77.1 | 80.0 | 80.8 | 79.3 | 80.8 | 82.9 | 83.6 | 85.9 | 90.5 | 93.4 | 92.3 | 88.3 | 80.9 | 169.6 |
| 500 | 79.8 | 80.8 | 80.3 | 80.3 | 81.2 | 82.7 | 83.9 | 86.4 | 90.3 | 93.5 | 90.2 | 86.5 | 79.0 | 169.4 |
| 630 | 80.6 | 82.8 | 83.8 | 81.6 | 83.9 | 84.3 | 84.0 | 86.6 | 90.0 | 92.2 | 88.0 | 84.2 | 76.9 | 169.0 |
| 800 | 79.5 | 82.8 | 84.9 | 84.7 | 84.6 | 85.6 | 84.6 | 85.4 | 89.6 | 90.6 | 87.0 | 82.8 | 75.0 | 169.0 |
| 1000 | 78.1 | 81.3 | 83.5 | 84.0 | 84.5 | 85.9 | 84.0 | 85.1 | 88.5 | 89.2 | 84.6 | 81.6 | 73.4 | 168.5 |
| 1250 | 78.4 | 81.3 | 82.0 | 82.7 | 83.9 | 85.2 | 83.7 | 84.8 | 86.9 | 87.4 | 82.3 | 79.0 | 71.5 | 168.1 |
| 1600 | 75.2 | 79.0 | 81.8 | 82.1 | 83.6 | 83.9 | 82.3 | 83.0 | 85.5 | 86.8 | 80.7 | 77.6 | 69.3 | 168.3 |
| 2000 | 73.5 | 78.2 | 80.0 | 81.7 | 83.2 | 83.8 | 80.8 | 81.4 | 83.3 | 84.0 | 77.8 | 74.0 | 65.2 | 168.3 |
| 2500 | 69.6 | 74.1 | 77.4 | 78.3 | 80.8 | 81.5 | 78.0 | 78.7 | 81.1 | 79.4 | 73.2 | 68.1 | 58.8 | 167.7 |
| 3150 | 61.0 | 69.2 | 72.0 | 73.7 | 77.1 | 76.9 | 73.8 | 72.7 | 75.7 | 74.9 | 68.0 | 59.3 | 46.9 | 167.1 |
| 4000 | 52.5 | 61.0 | 64.5 | 66.3 | 68.3 | 69.2 | 67.3 | 66.7 | 69.2 | 67.2 | 59.1 | 47.4 | 30.2 | 166.9 |
| 5000 | 38.0 | 46.5 | 54.0 | 58.4 | 63.4 | 62.5 | 58.2 | 58.0 | 59.4 | 54.3 | 44.0 | 28.7 | 2.6 | 167.0 |
| 6300 | 18.2 | 29.6 | 39.2 | 43.4 | 45.5 | 46.5 | 43.5 | 40.4 | 44.4 | 35.8 | 21.1 | | 166.9 | |
| 8000 | | | 10.1 | 17.8 | 19.6 | 20.9 | 20.6 | 15.6 | 18.2 | 7.4 | | | 166.6 | |
| 10000 | | | | | | | | | | | | | 164.7 | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| OASPL | 89.2 | 91.5 | 93.0 | 92.8 | 94.0 | 95.0 | 94.3 | 95.9 | 100.7 | 104.2 | 104.6 | 102.4 | 93.9 | 182.2 |
| PNL | 95.8 | 99.5 | 101.3 | 102.1 | 103.7 | 104.5 | 102.6 | 103.7 | 107.3 | 109.6 | 108.0 | 104.8 | 96.6 | |
| PNLT | 95.8 | 99.5 | 102.1 | 102.7 | 105.1 | 105.5 | 102.6 | 103.7 | 107.9 | 110.1 | 108.0 | 104.8 | 97.8 | |

DIAMETER RATIO 8.070 FREQUENCY SHIFT -9

TEST DATE 03-23-78 TAPE NO. N312 ALPHA SB59 TAMB 56.66
LOCATION C41 ANECH CH AERO. RDG. ADH205 PAMB 29.4300 RELHJM 70.30

MODEL TEST POINT 0215 ACOUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 120.70 M/SEC (396.0 FPS) FREE-JET SPEED

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X02160
BACKGROUND 0000000000 000000

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

150

200

250 86.8 92.8 92.6 92.1 92.7 94.2 97.2 99.9 101.8 109.2 113.8 120.0 117.4 151.7
315 89.1 91.2 91.7 92.5 94.6 97.2 97.6 99.7 104.2 112.0 115.9 121.3 118.2 153.2
400 90.9 92.9 93.7 92.7 94.6 97.0 97.6 100.2 105.7 115.5 118.7 123.1 117.5 155.0
500 92.2 94.3 95.0 94.8 95.9 98.3 99.7 102.1 107.3 117.9 120.5 122.9 117.6 155.9
630 93.6 95.4 96.4 95.7 97.8 99.9 101.0 104.2 110.1 119.7 122.3 123.3 118.2 157.1
800 97.6 96.1 97.7 98.2 99.0 101.1 102.3 105.4 112.4 120.7 122.9 123.5 118.4 157.7
1000 103.4 102.7 103.5 101.5 101.4 102.7 103.6 106.8 113.5 121.6 122.2 122.9 117.3 157.6
1250 100.0 103.3 104.6 104.1 104.7 105.6 105.4 108.4 114.1 121.9 122.8 122.4 116.1 157.9
1600 101.6 100.2 100.9 101.7 102.3 104.3 106.1 109.0 114.9 122.5 122.2 121.2 114.7 157.7
2000 103.0 102.7 102.5 101.3 101.4 103.7 105.6 109.3 116.0 122.6 120.8 119.3 112.5 157.1
2500 105.1 104.6 103.8 102.9 103.5 104.6 106.5 109.9 115.8 122.9 119.4 118.1 111.9 156.9
3150 104.3 105.3 104.8 103.9 103.7 105.3 107.0 111.1 116.1 121.4 117.9 117.4 109.9 156.0
4000 102.6 103.1 104.9 104.2 104.8 105.9 106.5 110.9 115.4 119.8 116.5 114.9 108.7 154.8
5000 102.0 102.8 103.6 104.1 105.4 107.0 107.4 111.3 114.6 119.5 115.6 113.8 107.0 154.5
6300 101.1 102.7 103.7 103.2 104.7 107.8 107.8 110.7 114.8 118.3 114.2 113.0 106.9 154.1
8000 100.2 103.1 103.5 103.3 104.9 106.8 107.6 109.9 113.7 116.8 113.5 111.0 105.7 153.3
10000 98.2 101.4 103.0 103.4 104.9 106.8 106.7 109.8 112.6 116.5 111.6 110.6 105.2 153.2
12500 95.5 99.1 101.0 102.2 104.2 105.6 105.3 108.0 110.6 114.6 109.9 108.3 103.3 152.3
16000 93.3 97.9 100.5 101.2 103.8 105.5 103.7 106.4 109.1 113.8 108.3 106.1 102.0 152.5
20000 88.0 95.6 96.9 98.8 102.9 103.7 100.9 103.9 107.3 110.6 105.5 104.2 99.3 151.8
25000 85.7 92.3 94.3 94.5 99.7 100.5 97.9 99.1 105.4 106.7 102.0 99.7 97.4 150.8
31500 84.4 88.6 91.7 93.4 94.4 95.4 94.4 96.4 101.5 105.4 100.5 95.5 91.2 151.1
40000 79.7 83.3 87.4 88.3 93.0 93.6 89.8 92.8 98.7 102.3 96.5 91.3 88.0 152.0
50000 73.0 78.6 80.0 82.3 85.1 86.7 85.8 86.4 95.0 97.9 92.3 86.1 82.2 151.7
63000 67.1 74.1 74.4 75.6 77.3 78.8 80.5 80.5 91.1 91.6 86.5 80.7 76.7 151.5
80000 61.5 66.9 69.5 72.1 70.4 73.7 73.8 76.2 85.7 87.6 82.8 74.3 69.7 153.6

OASPL 113.2 114.2 114.9 114.6 115.9 117.6 118.0 121.2 126.1 132.4 132.0 132.8 127.5 169.0

TEST DATE 03-23-78 TAPE NO. N312 ALPHA SB59 TAMB 54.50
LOCATION C41 ANECH CH AERD. RDG. ADH190 PAMB 29.4000 RELHUM 61.80

MODEL TEST POINT ACQUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL SIZE FREE-JET SPEED
O200 O216 0. M/SEC (O. FPS)

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02/15/80 9.180

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FU-ZER-FMODL X02160

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PML

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

OASPL

113.2

114.2

114.9

115.9

117.6

118.0

121.2

126.1

132.4

132.0

132.8

127.5

169.0

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) FREE JET DIAMETER (IN) 0. 48.00 REFRACTION CORRECTION - YES TURBULANCE CORRECTION - YES

TEST DATE 03-23-78 LOCATION C41 ANECH CH TAPE NO. N312 AERO. RDG. ADH190 IALPHA SB59 PAMB 29.4000 TAMB 54.50 RELHUM 61.80

MODEL TEST POINT 0216 ACQUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SO CM (21.49 SQ IN) - MODEL SIZE 0. FREE-JET SPEED M/SEC (O. FPS)

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.I. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X02161

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50 69.6 73.2 75.0 74.8 77.0 79.5 80.0 82.3 87.0 95.8 97.4 99.6 90.7 173.1
60 70.9 74.5 76.3 76.8 78.3 80.8 82.1 84.1 88.6 98.1 93.2 99.4 90.7 174.0
80 72.2 75.5 77.6 77.6 80.1 82.4 83.4 86.1 91.4 99.9 101.0 99.7 91.2 175.2
100 76.1 76.2 78.8 80.1 81.4 83.6 84.6 87.4 93.6 100.8 101.4 99.8 91.3 175.9
125 81.8 82.7 84.6 83.4 83.6 85.1 85.9 88.6 94.6 101.6 100.6 99.0 89.9 175.8
160 78.2 83.1 85.5 85.8 86.8 87.8 87.6 90.1 95.0 101.7 101.0 98.3 88.4 176.0
200 79.6 79.8 81.7 83.3 84.3 87.0 88.0 90.5 95.7 102.1 100.2 96.8 86.5 175.8
250 80.6 82.1 83.0 82.6 83.1 85.6 87.4 90.6 96.5 101.9 98.4 94.4 83.6 175.2
315 82.3 83.6 84.1 83.9 85.0 86.2 88.0 90.9 96.1 102.0 96.6 92.7 82.2 175.0
400 81.1 83.9 84.7 84.6 84.9 86.7 88.2 91.9 96.0 100.1 94.6 91.3 79.2 174.2
500 78.9 81.4 84.5 84.6 85.7 87.0 87.7 91.4 95.0 98.0 92.7 88.2 77.0 172.9
630 77.8 80.6 82.8 84.2 86.1 87.8 88.1 91.5 93.8 97.3 91.4 86.4 74.3 172.6
800 76.4 80.2 82.7 83.1 85.1 86.4 88.2 90.6 93.8 95.8 89.4 84.9 73.0 172.2
1000 75.0 80.3 82.2 83.0 85.2 87.2 87.9 89.6 92.4 93.9 88.4 82.2 70.7 171.5
1250 72.5 78.2 81.5 82.9 85.1 87.2 86.9 89.3 91.1 93.3 85.9 81.0 68.8 171.4
1600 69.0 75.3 79.0 81.4 85.7 85.2 87.2 88.7 90.9 83.4 77.4 64.5 170.4
2000 65.8 73.5 78.2 80.1 83.4 85.4 83.4 85.4 86.8 89.4 80.8 73.5 60.1 170.6
2500 58.7 70.0 73.7 77.1 82.0 83.1 80.0 82.2 84.1 85.1 76.2 68.8 52.6 169.9
3150 53.0 64.2 69.2 71.3 77.4 78.6 75.6 75.8 80.3 78.7 69.4 59.4 42.3 168.9
4000 45.5 55.8 66.9 69.2 70.6 69.2 69.9 72.6 72.6 61.6 46.3 21.5 169.3
5000 31.0 42.9 52.3 56.3 62.8 63.9 59.6 60.9 63.5 62.0 47.9 28.3 170.1
6300 6.6 24.0 32.8 39.5 44.8 47.2 45.5 43.6 47.8 43.3 25.8 169.8
8000 5.9 14.6 18.8 21.5 22.0 18.5 22.5 12.2 171.7

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DASPL 90.2 92.7 94.6 95.1 96.7 98.6 99.0 101.7 106.0 111.5 109.8 108.1 98.9 187.0
PNL 94.8 98.6 101.2 102.6 105.4 107.1 106.3 108.6 112.0 116.3 112.2 108.6 98.2
PNLT 95.9 99.1 101.2 102.6 106.7 108.2 106.8 108.6 112.6 117.0 112.2 108.6 99.4

DIAMETER RATIO 8.070 FREQUENCY SHIFT -9

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 54.50
LOCATION C41 ANECH CH AERO. RDG. ADH190 PAMB 29.4000 RELHJM 61.83

MODEL TEST POINT 0216 ACOUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 0. FREE-JET SPEED 0. FPS

02/15/80 9.180

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X02170
BACKGROUND FJB300-FMODL X05230

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

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DASPL 110.3 111.2 112.5 112.1 113.4 115.2 115.1 118.8 123.7 130.9 130.6 122.7 167.1

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 48.20
LOCATION C41 ANECH CH AERO. RDG. ADH203 PAMB 29.4300 RELHUM 76.40

MODEL TEST POINT ACQUSTIC RANGE SIZE FREE-JET SPEED
0200 0217 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 90.22 M/SEC (296.0 FPS)

251

02/15/80 9.190

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X02170

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 89.9 | 93.3 | 92.6 | 92.0 | 91.1 | 92.1 | 92.5 | 93.9 | 98.0 | 105.4 | 108.8 | 116.1 | 113.5 | 147.7 |
| 315 | 89.9 | 93.3 | 92.5 | 91.2 | 92.6 | 94.0 | 93.0 | 94.1 | 99.7 | 109.1 | 113.1 | 118.3 | 114.3 | 150.0 |
| 400 | 91.9 | 93.0 | 92.3 | 92.1 | 92.6 | 94.1 | 93.9 | 95.1 | 102.2 | 113.0 | 116.0 | 120.4 | 115.0 | 152.4 |
| 500 | 93.6 | 93.9 | 94.0 | 94.1 | 94.3 | 95.0 | 95.6 | 96.5 | 105.0 | 115.1 | 119.1 | 122.0 | 115.5 | 154.4 |
| 630 | 94.2 | 94.9 | 95.6 | 95.0 | 95.6 | 96.6 | 96.4 | 98.8 | 106.8 | 117.0 | 120.2 | 122.2 | 115.6 | 155.1 |
| 800 | 95.3 | 96.0 | 96.3 | 96.4 | 96.0 | 97.4 | 98.1 | 100.9 | 109.3 | 118.2 | 120.4 | 121.8 | 115.4 | 155.4 |
| 1000 | 98.1 | 96.6 | 96.9 | 98.4 | 98.1 | 99.6 | 99.7 | 102.5 | 110.1 | 118.4 | 121.3 | 121.0 | 114.5 | 155.5 |
| 1250 | 100.0 | 99.5 | 100.1 | 101.8 | 102.0 | 102.0 | 100.8 | 103.5 | 111.2 | 119.3 | 121.0 | 120.5 | 113.8 | 155.6 |
| 1600 | 100.3 | 102.5 | 103.3 | 100.7 | 101.5 | 103.0 | 102.8 | 104.7 | 112.3 | 120.3 | 119.7 | 118.8 | 112.6 | 155.3 |
| 2000 | 101.6 | 101.1 | 101.7 | 100.3 | 99.9 | 101.9 | 105.3 | 112.6 | 121.1 | 118.8 | 117.6 | 112.4 | 115.2 | |
| 2500 | 102.2 | 101.6 | 101.5 | 102.1 | 101.7 | 103.0 | 103.0 | 106.1 | 113.9 | 119.9 | 118.1 | 117.2 | 111.3 | 154.7 |
| 3150 | 106.1 | 105.7 | 104.7 | 105.1 | 103.6 | 104.2 | 103.7 | 107.9 | 113.5 | 118.3 | 116.8 | 115.6 | 109.6 | 153.8 |
| 4000 | 105.7 | 106.3 | 106.5 | 105.9 | 105.5 | 105.5 | 104.1 | 107.5 | 113.4 | 119.0 | 115.9 | 114.7 | 109.1 | 154.0 |
| 5000 | 105.5 | 105.5 | 107.0 | 105.8 | 106.0 | 106.8 | 105.6 | 108.8 | 113.5 | 118.2 | 115.1 | 113.8 | 109.1 | 153.8 |
| 6300 | 105.3 | 105.0 | 105.8 | 104.7 | 105.2 | 108.0 | 106.4 | 108.6 | 113.7 | 117.1 | 114.3 | 112.2 | 108.3 | 153.4 |
| 8000 | 104.8 | 105.3 | 106.0 | 104.9 | 106.1 | 107.6 | 106.8 | 108.6 | 112.7 | 117.2 | 112.8 | 111.5 | 107.0 | 153.4 |
| 10000 | 104.7 | 105.4 | 105.8 | 105.3 | 106.5 | 107.8 | 105.5 | 108.2 | 111.2 | 114.6 | 110.6 | 110.0 | 105.8 | 152.5 |
| 12500 | 103.1 | 103.7 | 105.2 | 105.4 | 106.4 | 106.5 | 104.1 | 107.1 | 109.9 | 114.2 | 109.2 | 108.4 | 105.2 | 152.5 |
| 16000 | 101.3 | 103.0 | 104.0 | 103.8 | 105.4 | 106.1 | 103.4 | 105.8 | 108.3 | 111.6 | 107.0 | 106.4 | 103.9 | 152.1 |
| 20000 | 99.5 | 101.1 | 102.8 | 101.1 | 104.5 | 104.5 | 100.8 | 102.7 | 106.8 | 108.4 | 104.5 | 102.7 | 102.5 | 151.6 |
| 25000 | 94.0 | 97.8 | 98.5 | 97.7 | 101.2 | 101.5 | 97.3 | 97.3 | 103.6 | 107.2 | 102.3 | 98.7 | 98.2 | 151.1 |
| 31500 | 91.8 | 94.1 | 94.8 | 96.3 | 96.3 | 96.0 | 93.8 | 94.7 | 99.7 | 104.1 | 98.9 | 94.7 | 94.3 | 150.6 |
| 40000 | 89.3 | 88.4 | 91.5 | 90.7 | 94.4 | 94.1 | 89.1 | 90.3 | 96.3 | 99.9 | 93.6 | 88.7 | 89.2 | 150.8 |
| 50000 | 83.3 | 82.8 | 85.9 | 84.3 | 86.2 | 86.6 | 84.2 | 83.4 | 92.9 | 94.7 | 88.9 | 83.6 | 84.5 | 149.7 |
| 63000 | 76.1 | 77.3 | 77.9 | 76.9 | 77.6 | 78.0 | 78.6 | 76.9 | 89.2 | 92.2 | 85.1 | 76.9 | 77.9 | 150.9 |
| 80000 | 66.6 | 68.6 | 69.0 | 71.9 | 70.4 | 72.3 | 70.8 | 70.8 | 79.3 | 82.4 | 75.3 | 67.1 | 68.1 | 148.5 |
| OASPL | 115.1 | 115.5 | 116.1 | 115.6 | 116.2 | 117.2 | 115.8 | 118.4 | 124.0 | 130.3 | 130.2 | 131.0 | 125.3 | 167.4 |

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 296.00 REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-23-78 TAPE NO. N312 ALPHA SB59 TAMB 48.20
 LOCATION C41 ANECH CH AERO. RDG. ADH203 PAMB 29.4300 RELHUM 76.40

MODEL TEST POINT O217 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 90.22 M/SEC (296.0 FPS) FREE-JET SPEED

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OF POOR QUALITY

02/15/80 9.180

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL K02171

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|-------|------|------|-------|-------|
| 50 | 70.6 | 73.3 | 73.6 | 74.1 | 75.0 | 76.7 | 76.3 | 77.1 | 83.5 | 93.3 | 94.7 | 96.9 | 88.2 | 170.5 |
| 63 | 72.3 | 74.1 | 75.3 | 76.1 | 76.7 | 77.5 | 78.0 | 78.5 | 86.3 | 95.3 | 97.8 | 98.5 | 88.6 | 172.5 |
| 80 | 72.9 | 75.1 | 76.9 | 76.9 | 78.0 | 79.1 | 78.8 | 80.8 | 88.1 | 97.1 | 98.8 | 98.6 | 88.6 | 173.3 |
| 100 | 73.9 | 76.1 | 77.5 | 78.3 | 78.4 | 79.9 | 80.4 | 82.8 | 90.5 | 98.3 | 98.9 | 98.1 | 88.3 | 173.5 |
| 125 | 76.6 | 76.6 | 78.0 | 80.2 | 80.4 | 82.0 | 82.0 | 84.3 | 91.2 | 98.4 | 99.7 | 97.1 | 87.1 | 173.7 |
| 160 | 78.2 | 79.4 | 81.1 | 83.5 | 84.1 | 84.3 | 83.0 | 85.2 | 92.2 | 99.2 | 99.2 | 96.4 | 86.1 | 173.8 |
| 200 | 78.3 | 82.1 | 84.1 | 82.2 | 83.4 | 85.1 | 84.8 | 86.3 | 93.1 | 100.0 | 97.6 | 94.4 | 84.3 | 173.5 |
| 250 | 79.2 | 80.5 | 82.2 | 81.7 | 81.6 | 83.8 | 83.7 | 86.7 | 93.1 | 100.4 | 96.5 | 92.7 | 83.6 | 173.4 |
| 315 | 79.5 | 80.6 | 81.7 | 83.1 | 83.2 | 84.6 | 84.5 | 87.2 | 94.1 | 98.9 | 95.4 | 91.8 | 81.6 | 172.8 |
| 400 | 82.8 | 84.3 | 84.6 | 85.9 | 84.9 | 85.5 | 84.9 | 88.6 | 93.4 | 97.0 | 93.6 | 89.5 | 78.9 | 172.0 |
| 500 | 81.9 | 84.5 | 86.1 | 86.3 | 86.5 | 86.6 | 85.0 | 87.9 | 93.0 | 97.2 | 92.2 | 88.0 | 77.5 | 172.1 |
| 630 | 81.3 | 83.3 | 86.3 | 85.9 | 86.7 | 87.6 | 86.2 | 88.9 | 92.7 | 96.1 | 90.9 | 86.4 | 76.4 | 171.9 |
| 800 | 80.6 | 82.5 | 84.8 | 84.6 | 85.6 | 88.6 | 86.8 | 88.5 | 92.6 | 94.6 | 89.6 | 84.1 | 74.5 | 171.5 |
| 1000 | 79.6 | 82.5 | 84.7 | 84.6 | 86.3 | 88.0 | 87.1 | 88.3 | 91.4 | 94.4 | 87.6 | 82.7 | 71.9 | 171.6 |
| 1250 | 79.0 | 82.3 | 84.3 | 84.8 | 86.6 | 88.1 | 85.6 | 87.8 | 89.7 | 91.4 | 84.9 | 80.4 | 69.3 | 170.6 |
| 1600 | 76.6 | 80.0 | 83.2 | 84.6 | 86.3 | 86.6 | 83.9 | 86.3 | 88.0 | 90.4 | 82.6 | 77.5 | 66.4 | 170.6 |
| 2000 | 73.8 | 78.6 | 81.7 | 82.8 | 85.1 | 86.0 | 83.1 | 84.7 | 86.0 | 87.3 | 79.5 | 73.8 | 62.1 | 170.2 |
| 2500 | 70.2 | 75.5 | 79.6 | 79.4 | 83.6 | 83.9 | 80.0 | 81.0 | 83.6 | 82.9 | 75.2 | 67.4 | 55.8 | 169.8 |
| 3150 | 61.3 | 69.8 | 73.4 | 74.5 | 78.9 | 79.6 | 75.0 | 74.0 | 78.5 | 79.2 | 69.7 | 58.3 | 43.0 | 169.2 |
| 4000 | 52.9 | 61.3 | 65.9 | 69.7 | 71.1 | 71.2 | 68.0 | 68.2 | 70.8 | 71.3 | 60.0 | 45.4 | 24.6 | 168.8 |
| 5000 | 40.7 | 48.1 | 56.4 | 58.8 | 64.2 | 64.4 | 58.9 | 58.3 | 61.2 | 59.6 | 44.9 | 25.7 | 168.9 | |
| 6300 | 16.8 | 28.3 | 38.7 | 41.6 | 45.9 | 47.0 | 43.9 | 40.7 | 45.7 | 40.1 | 22.4 | | 167.9 | |
| 8000 | | | 9.3 | 15.0 | 19.2 | 20.7 | 20.1 | 14.9 | 20.6 | 12.9 | | | 169.1 | |
| 10000 | | | | | | | | | | | | | 166.6 | |

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DIAMETER RATIO 8.070, FREQUENCY SHIFT -9

TEST DATE 03-23-78 TAPE NO. N312 ALPHA 5859 TAMB 48.20
LOCATION C41 ANECH CH AERD. RDG. ADH203 PAMB 29.4300 RELHUM 76.40

MODEL TEST POINT 0217 ACQUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 90.22 M/SEC (296.0 FPS) FREE-JET SPEED

02/15/80 9.180

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X02180
BACKGROUND FJB400-FMODL X05220

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

160

200

250 84.5 87.5 88.3 88.6 88.9 91.3 92.9 96.1 98.1 104.9 110.3 117.0 114.4 148.5
315 85.8 87.6 88.1 87.9 89.8 92.9 93.5 95.2 99.9 108.0 112.1 116.8 115.0 150.1
400 87.9 88.4 89.7 88.2 90.3 92.7 93.3 95.7 100.9 111.3 115.9 119.8 113.3 151.6
500 88.4 89.7 91.8 90.5 91.9 94.0 95.6 97.1 102.8 114.1 117.5 120.2 111.1 152.6
630 89.0 91.1 92.6 91.7 93.2 95.9 97.2 99.9 105.6 116.0 119.3 119.8 108.9 153.5
800 92.3 90.9 93.1 93.7 94.5 96.9 98.0 101.7 107.4 117.7 120.6 118.3 106.9 154.1
1000 93.9 94.0 95.5 94.3 95.6 98.2 99.3 103.3 109.5 119.1 120.4 116.6 105.3 154.3
1250 94.3 96.8 98.6 97.8 98.2 100.3 100.4 104.6 110.6 119.4 121.3 116.7 105.4 154.9
1600 95.8 95.4 97.2 97.5 98.0 100.9 102.3 106.0 111.9 120.2 120.7 116.0 105.2 155.0
2000 99.2 99.0 98.0 96.8 97.3 100.0 102.8 106.5 113.2 121.0 120.0 115.2 105.3 155.2
2500 101.6 102.8 102.1 100.1 99.2 101.1 103.7 107.9 113.6 121.9 118.6 114.9 105.4 155.4
3150 102.3 103.1 103.1 102.5 101.4 102.3 104.2 108.9 114.3 120.4 117.9 113.6 103.8 154.7
4000 99.8 103.4 102.9 103.0 103.6 104.5 108.2 113.9 118.7 116.7 112.4 102.4 153.6
5000 100.0 100.3 101.3 102.3 103.6 104.5 104.9 108.0 112.8 118.6 115.3 111.0 102.3 153.2
6300 99.3 100.4 101.4 101.1 102.2 105.5 105.5 108.4 112.7 117.5 114.1 109.1 100.8 152.6
8000 99.4 101.0 101.6 101.2 102.5 103.9 105.5 107.8 112.3 116.7 112.7 107.9 99.9 152.2
10000 98.1 99.3 101.4 101.7 102.8 104.2 104.1 107.9 110.9 115.1 110.7 107.0 98.1 151.5
12500 95.1 97.4 99.0 100.0 102.1 103.2 102.9 106.0 108.7 113.4 108.5 105.2 97.1 150.5
16000 92.9 95.4 98.2 98.7 101.3 102.7 101.2 104.7 107.1 112.4 106.5 103.6 96.0 150.6
20000 88.3 93.5 94.6 95.7 100.2 101.2 98.9 101.8 105.1 109.1 104.0 101.2 94.4 149.7
25000 87.0 90.0 91.6 92.1 97.0 98.1 95.7 97.1 102.7 105.9 101.0 97.0 92.5 148.9
31500 85.4 86.0 89.4 91.3 91.9 92.6 92.8 94.6 99.4 104.3 97.9 92.5 87.6 149.4
40000 80.8 81.2 84.8 86.4 90.9 91.5 88.2 90.5 95.8 100.5 94.9 87.7 83.6 149.9
50000 73.9 76.2 77.6 80.4 83.0 84.3 83.4 84.2 91.7 94.9 89.4 82.9 78.0 148.7
63000 68.9 71.5 72.4 73.5 74.6 76.4 78.3 78.1 88.5 90.6 84.2 77.3 73.0 149.6
80000 62.8 64.6 66.2 68.5 68.0 70.8 71.2 72.9 82.9 87.4 80.2 69.6 65.2 152.1

OASPL 110.1 111.2 112.1 112.0 113.0 114.6 115.2 118.6 123.6 130.6 130.3 128.8 121.2 166.7

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 52.88
LOCATION C41 ANECH CH AERO. RDG. ADH202 PAMB 29.4300 RELHUM 73.10

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 120.70 M/SEC (396.0 FPS)
O200 O218

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OF POOR QUALITY

02/15/80 9.180

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FU-400-FMODL X02180

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

160

200

250 91.6 93.5 92.9 91.7 90.4 91.3 91.0 92.5 96.5 103.7 107.3 114.4 112.4 146.2

315 91.6 93.4 92.9 91.6 91.5 93.1 92.2 92.4 98.5 107.9 112.2 116.8 112.7 148.7

400 93.4 93.9 93.0 91.3 91.9 92.9 92.5 93.7 101.1 111.9 115.2 119.2 113.5 151.3

500 94.1 93.8 93.9 91.2 93.7 94.3 94.9 95.4 104.2 114.2 117.9 120.3 114.1 153.0

630 95.2 95.6 96.4 93.8 95.2 96.3 96.5 98.1 106.1 116.2 119.5 120.0 114.8 153.9

800 96.6 97.5 97.6 95.1 96.5 97.4 97.2 99.8 108.4 117.8 119.9 119.5 115.6 154.5

1000 99.4 96.9 97.9 97.1 97.5 98.8 98.6 101.4 109.6 118.3 120.8 119.7 115.8 155.0

1250 100.1 99.4 99.9 97.4 100.4 101.1 101.9 102.8 111.1 119.2 120.4 119.1 115.8 155.2

1600 101.4 102.9 103.5 101.4 100.5 101.9 101.9 102.9 112.6 120.2 119.8 118.5 116.0 155.4

2000 103.4 101.9 102.4 101.3 99.4 101.2 105.1 113.3 121.4 118.8 118.4 116.4 155.8

2500 105.0 103.8 101.9 99.7 101.6 102.6 103.9 106.8 114.5 120.4 118.5 117.6 115.4 155.3

3150 107.7 108.0 106.2 103.3 104.1 104.3 104.8 108.2 114.7 116.7 116.7 114.1 154.9

4000 107.5 107.7 107.0 105.9 106.6 106.1 105.6 108.1 113.7 119.2 116.3 115.3 113.9 154.6

5000 107.3 107.5 109.1 107.5 107.6 107.5 106.3 108.1 113.7 118.0 115.0 113.2 112.1 154.0

6300 107.3 106.9 107.1 107.1 106.2 108.5 106.9 108.5 113.3 117.2 113.6 111.9 111.1 153.6

8000 106.5 106.9 107.0 105.8 106.6 106.9 106.9 107.9 112.1 115.8 111.8 111.2 109.4 152.9

10000 106.4 107.3 107.1 105.7 106.8 107.2 105.5 108.0 110.2 114.5 110.0 109.9 109.2 152.6

12500 104.8 105.3 106.6 105.9 106.1 106.2 104.4 106.1 109.1 114.1 108.6 108.9 108.6 152.5

16000 101.3 102.9 103.7 103.7 105.8 105.7 102.7 104.7 107.8 111.5 107.0 107.5 108.1 152.1

20000 101.5 102.8 104.2 103.1 104.7 104.2 100.6 102.1 106.2 109.3 105.0 104.4 107.3 152.3

25000 96.3 100.3 100.0 99.5 101.6 101.1 97.5 97.6 103.2 107.5 101.4 99.0 101.0 151.5

31500 94.2 96.0 96.1 95.1 95.9 95.6 94.3 94.6 100.4 104.6 99.4 95.1 97.9 151.1

40000 89.0 88.9 91.4 92.4 95.4 94.5 89.6 90.5 96.7 99.4 94.2 90.7 92.7 151.1

50000 86.8 85.9 88.1 88.2 87.7 87.3 84.8 84.3 94.5 96.1 89.9 86.0 88.6 151.4

63000 78.9 80.0 80.0 81.2 78.7 79.4 79.8 78.1 90.3 94.3 87.5 79.9 82.3 152.8

80000 69.7 71.6 71.6 72.0 73.8 72.6 72.9 80.5 84.5 77.6 70.1 72.5 150.3

OASPL 116.8 117.1 117.2 116.0 116.6 117.1 116.1 118.1 124.0 130.3 129.9 129.9 126.6 167.4

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 396.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-23-78 TAPE NO. N312 ALPHA SB59 TAMB 52.88
LOCATION C41 ANECH CH AERO. RDG. ADH202 PAMB 29.4300 RELHUM 73.10

MODEL TEST POINT 0218 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 13.7 SQ CM (21.49 SQ IN) - MODEL 120.70 M/SEC (396.0 FPS)
FREE-JET SPEED

02/15/80 9.180

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X02181

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|-------|------|------|------|-------|
| 50 | 72.1 | 74.2 | 74.3 | 73.3 | 74.3 | 75.5 | 74.9 | 75.7 | 82.4 | 92.2 | 93.5 | 95.7 | 86.7 | 169.4 |
| 63 | 72.8 | 74.0 | 75.2 | 73.2 | 76.1 | 76.9 | 77.3 | 77.4 | 85.5 | 94.4 | 96.5 | 96.8 | 87.2 | 171.1 |
| 80 | 73.8 | 75.7 | 77.6 | 75.7 | 77.6 | 78.8 | 78.9 | 80.1 | 87.3 | 96.3 | 98.2 | 98.2 | 87.7 | 172.1 |
| 100 | 75.1 | 77.6 | 78.8 | 77.0 | 78.8 | 79.9 | 79.6 | 81.7 | 89.6 | 97.9 | 98.5 | 95.8 | 88.4 | 172.6 |
| 125 | 77.8 | 79.9 | 79.0 | 78.9 | 79.8 | 81.2 | 80.9 | 83.2 | 90.7 | 98.3 | 99.2 | 95.8 | 88.4 | 173.2 |
| 160 | 78.3 | 79.2 | 80.8 | 79.2 | 82.5 | 83.4 | 82.0 | 84.5 | 92.1 | 99.1 | 98.6 | 94.9 | 88.0 | 173.3 |
| 200 | 79.4 | 82.6 | 84.3 | 83.0 | 82.5 | 84.0 | 83.9 | 85.9 | 93.4 | 99.9 | 97.8 | 94.1 | 87.8 | 173.6 |
| 250 | 81.0 | 81.2 | 82.9 | 82.6 | 81.2 | 83.1 | 84.5 | 86.4 | 93.9 | 100.8 | 96.4 | 93.5 | 87.6 | 173.9 |
| 315 | 82.3 | 82.8 | 82.1 | 80.7 | 83.1 | 84.3 | 85.4 | 87.8 | 94.8 | 99.4 | 95.7 | 92.2 | 85.7 | 173.4 |
| 400 | 84.5 | 86.6 | 85.1 | 84.0 | 85.3 | 85.7 | 86.0 | 88.9 | 94.6 | 97.9 | 94.4 | 90.6 | 83.4 | 173.0 |
| 500 | 83.8 | 85.9 | 86.6 | 86.3 | 87.6 | 87.2 | 86.6 | 88.5 | 93.2 | 97.4 | 92.5 | 88.6 | 82.2 | 172.7 |
| 630 | 83.1 | 85.3 | 88.3 | 87.7 | 88.3 | 88.3 | 87.0 | 88.3 | 92.9 | 95.8 | 90.7 | 85.8 | 79.4 | 172.2 |
| 800 | 82.6 | 84.4 | 86.0 | 87.0 | 86.6 | 89.1 | 87.3 | 88.3 | 92.3 | 94.7 | 88.9 | 83.8 | 77.2 | 171.7 |
| 1000 | 81.4 | 84.0 | 85.7 | 85.5 | 86.8 | 87.4 | 87.2 | 87.6 | 90.8 | 93.0 | 86.6 | 82.4 | 74.4 | 171.0 |
| 1250 | 80.7 | 84.1 | 85.5 | 85.3 | 87.0 | 87.5 | 85.7 | 87.5 | 88.7 | 91.4 | 84.4 | 80.4 | 72.8 | 170.7 |
| 1600 | 78.3 | 81.5 | 84.6 | 85.1 | 85.9 | 86.2 | 84.2 | 85.3 | 87.2 | 90.3 | 82.1 | 77.9 | 69.8 | 170.6 |
| 2000 | 73.8 | 78.6 | 81.3 | 82.7 | 85.5 | 85.7 | 82.4 | 83.7 | 85.5 | 87.1 | 79.5 | 75.0 | 66.3 | 170.2 |
| 2500 | 72.1 | 77.2 | 81.0 | 81.4 | 83.9 | 83.6 | 79.7 | 80.4 | 83.0 | 83.7 | 75.7 | 69.0 | 60.5 | 170.4 |
| 3150 | 63.6 | 72.3 | 74.9 | 76.3 | 79.1 | 79.3 | 79.1 | 75.3 | 74.4 | 79.5 | 68.8 | 58.7 | 45.9 | 169.6 |
| 4000 | 55.3 | 63.2 | 67.2 | 68.5 | 70.7 | 70.8 | 65.0 | 68.1 | 71.5 | 71.8 | 60.5 | 45.8 | 28.3 | 169.3 |
| 5000 | 40.3 | 48.5 | 56.3 | 60.4 | 65.2 | 64.8 | 59.4 | 58.5 | 61.5 | 59.0 | 45.6 | 27.7 | 1.2 | 169.2 |
| 6300 | 20.3 | 31.4 | 40.9 | 45.5 | 47.2 | 47.8 | 44.5 | 41.5 | 47.2 | 41.5 | 23.5 | | | 169.5 |
| 8000 | | 0.7 | 11.5 | 19.2 | 20.2 | 22.1 | 21.3 | 16.1 | 21.8 | 15.0 | | | | 171.0 |
| 10000 | | | | | | | | | | | | | | 168.5 |

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DIAMETER RATIO 8.070 FREQUENCY SHIFT -9

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 52.88
LOCATION C41 ANECH CH AERO. RDG. ADH202 PAMB 29.4300 RELHUM 73.10

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
0200 0218 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 120.70 M/SEC (396.0 FPS)

02/15/80 9.180

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X02190
BACKGROUND 0000000000 000000

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PVL

FREQ

50

63

80

100

125

160

200

250 82.0 87.8 85.8 86.4 87.2 89.6 92.0 93.9 95.9 102.2 106.8 113.0 110.1 144.7
315 83.1 85.9 86.7 87.0 89.3 91.2 92.1 93.7 97.9 104.2 108.4 114.6 110.5 146.1
400 84.9 87.2 87.5 88.8 91.2 92.6 94.7 99.2 108.3 110.9 115.8 111.5 147.8
500 86.0 86.8 89.3 89.1 90.4 92.5 93.4 95.6 100.0 108.9 112.5 116.7 111.8 148.7
630 86.6 89.6 90.4 92.8 94.1 94.8 97.4 102.1 109.2 112.6 117.0 112.7 149.2
800 90.1 89.6 90.4 91.7 92.3 95.1 96.0 98.9 103.9 109.7 112.1 116.3 112.7 148.9
1000 93.9 93.7 93.0 93.0 93.9 96.0 97.4 100.0 104.7 109.8 110.4 114.9 111.8 148.0
1250 90.8 93.5 93.8 94.6 95.9 97.6 98.4 100.5 104.8 109.1 110.8 114.4 110.6 147.8
1600 91.8 91.5 91.7 94.2 95.1 97.4 98.3 101.7 105.9 108.8 109.7 115.0 111.2 147.9
2000 93.5 94.2 94.0 94.9 97.0 98.4 101.5 106.0 109.1 109.5 114.0 110.0 147.5
2500 91.8 93.8 94.1 94.9 95.7 97.6 99.7 102.1 104.9 110.2 109.2 114.9 110.1 148.0
3150 94.1 95.3 90.3 95.1 95.7 98.3 99.7 102.6 106.1 108.7 109.4 114.4 108.6 147.7
4000 94.1 94.2 94.9 95.5 98.1 99.5 102.4 105.2 107.8 109.5 113.2 108.2 147.0
5000 93.3 93.8 94.1 94.4 95.9 98.3 99.7 102.9 104.6 108.0 109.6 112.6 107.6 147.0
6300 91.6 93.7 94.3 93.7 95.5 98.9 99.1 102.5 104.1 107.1 108.2 111.7 107.4 146.4
8000 91.0 94.9 94.1 94.1 95.7 97.6 99.1 101.5 104.2 105.8 107.3 110.0 106.3 145.8
10000 88.2 94.0 95.1 94.4 96.0 98.4 97.8 101.1 102.9 104.6 105.7 109.2 105.5 145.4
12500 84.8 91.2 92.6 93.3 95.6 96.4 96.4 99.8 101.2 102.5 104.0 106.9 103.1 144.3
16000 82.6 89.5 91.5 92.0 94.6 96.5 95.3 98.2 99.4 101.6 101.8 104.6 101.8 144.1
20000 77.5 86.6 87.6 89.3 93.4 94.7 92.9 95.1 97.1 98.4 98.5 101.9 99.3 143.2
25000 75.1 82.9 84.9 89.8 91.7 89.5 90.2 94.5 93.5 94.9 98.4 97.1 142.0
31500 73.7 78.7 81.9 83.8 84.6 85.3 85.6 87.6 90.7 92.0 92.6 94.5 91.1 141.6
40000 69.7 73.1 76.8 78.5 83.2 84.1 80.2 82.3 85.8 87.1 88.7 89.3 87.0 141.2
50000 63.5 68.7 69.8 72.9 75.8 77.2 76.0 75.8 81.6 80.9 82.7 84.8 81.9 140.1
63000 58.1 63.7 64.0 67.0 68.3 69.3 70.5 69.4 76.7 74.5 77.1 79.7 76.2 139.7
80000 51.1 55.6 57.9 61.1 60.7 63.8 63.1 63.2 70.9 68.8 72.2 72.9 69.6 140.5

OASPL 103.6 105.4 106.2 106.0 107.5 109.6 110.4 113.3 116.5 120.6 122.4 126.8 122.7 160.4

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 51.26
LOCATION C41 ANECH CH AERO. RDG. ADH188 PAMB 29.4000 RELHUM 63.60

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
0200 0219 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 0. M/SEC (0. FPS)

02/15/80 9.180

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMOOL X02191

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 63.6 | 67.4 | 68.8 | 69.5 | 71.3 | 73.8 | 75.0 | 76.8 | 80.5 | 88.5 | 89.6 | 92.3 | 84.7 | 166.0 |
| 63 | 64.6 | 69.0 | 70.8 | 71.1 | 72.8 | 75.1 | 75.8 | 77.6 | 81.3 | 89.1 | 91.2 | 93.1 | 84.9 | 166.9 |
| 80 | 65.2 | 69.8 | 71.6 | 72.4 | 75.1 | 76.6 | 77.1 | 79.4 | 83.4 | 89.4 | 91.2 | 93.4 | 85.7 | 167.3 |
| 100 | 68.6 | 69.7 | 72.1 | 73.6 | 74.6 | 77.6 | 78.4 | 80.9 | 85.1 | 89.8 | 90.6 | 92.6 | 85.5 | 167.0 |
| 125 | 72.3 | 73.7 | 76.1 | 74.9 | 76.1 | 78.4 | 79.6 | 81.9 | 85.8 | 89.8 | 88.9 | 91.0 | 84.4 | 166.2 |
| 160 | 69.0 | 73.4 | 75.8 | 76.3 | 78.1 | 79.8 | 80.6 | 82.6 | 85.8 | 89.0 | 89.0 | 90.3 | 82.9 | 165.9 |
| 200 | 69.8 | 71.6 | 74.2 | 75.8 | 77.0 | 79.5 | 80.3 | 83.3 | 86.7 | 88.4 | 87.7 | 90.5 | 83.0 | 166.1 |
| 250 | 71.1 | 73.6 | 75.8 | 75.3 | 76.6 | 78.9 | 80.1 | 82.8 | 86.5 | 88.4 | 87.2 | 89.1 | 81.1 | 165.6 |
| 315 | 69.1 | 72.9 | 75.4 | 75.9 | 77.2 | 79.2 | 81.2 | 83.2 | 85.1 | 89.2 | 86.4 | 89.5 | 80.4 | 166.1 |
| 400 | 70.8 | 74.0 | 75.3 | 75.9 | 76.9 | 79.7 | 80.9 | 83.4 | 86.0 | 87.3 | 86.1 | 88.3 | 77.9 | 165.8 |
| 500 | 70.4 | 72.4 | 74.5 | 74.9 | 76.5 | 79.2 | 80.5 | 82.9 | 84.8 | 86.0 | 85.7 | 86.5 | 76.5 | 165.2 |
| 630 | 69.0 | 71.7 | 73.3 | 74.5 | 76.6 | 79.1 | 80.3 | 83.0 | 83.8 | 85.8 | 85.4 | 85.2 | 74.8 | 165.1 |
| 800 | 66.9 | 71.2 | 73.2 | 73.6 | 75.9 | 79.5 | 79.5 | 82.4 | 82.0 | 84.6 | 83.5 | 83.6 | 73.6 | 164.6 |
| 1000 | 65.8 | 72.1 | 73.5 | 73.8 | 76.0 | 78.0 | 79.4 | 81.2 | 82.9 | 83.0 | 82.2 | 81.2 | 71.3 | 164.0 |
| 1250 | 62.6 | 70.8 | 73.6 | 74.0 | 76.1 | 78.7 | 77.9 | 80.7 | 81.4 | 81.4 | 80.0 | 79.6 | 69.1 | 163.5 |
| 1600 | 58.3 | 67.4 | 70.6 | 72.5 | 75.4 | 76.5 | 76.3 | 79.0 | 79.3 | 78.7 | 77.4 | 76.0 | 64.3 | 162.5 |
| 2000 | 55.1 | 65.1 | 69.2 | 70.9 | 74.3 | 76.5 | 76.9 | 77.2 | 77.1 | 77.2 | 74.3 | 72.1 | 59.9 | 162.2 |
| 2500 | 48.2 | 61.0 | 64.4 | 67.5 | 72.5 | 74.1 | 72.0 | 73.4 | 73.9 | 72.8 | 69.2 | 66.6 | 52.6 | 161.3 |
| 3150 | 42.4 | 54.8 | 59.8 | 61.6 | 67.6 | 69.7 | 67.3 | 66.9 | 69.4 | 65.5 | 62.2 | 58.0 | 41.9 | 160.1 |
| 4000 | 34.8 | 45.9 | 53.0 | 57.3 | 59.4 | 60.5 | 60.4 | 61.1 | 61.8 | 59.2 | 53.7 | 45.2 | 21.5 | 159.7 |
| 5000 | 21.0 | 32.8 | 41.6 | 46.5 | 53.0 | 54.4 | 50.0 | 50.3 | 50.6 | 46.8 | 40.0 | 26.3 | 159.4 | |
| 6300 | 14.1 | 22.6 | 30.2 | 35.5 | 37.7 | 37.7 | 35.7 | 33.0 | 34.4 | 26.3 | 16.2 | | 158.2 | |
| 8000 | | | | | | | | | | | | | 157.8 | |
| 10000 | | | | | | | | | | | | | 158.6 | |

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OASPL 80.6 83.9 86.0 86.6 88.4 90.7 91.5 93.9 96.5 99.7 99.8 101.7 93.8 178.2

PWL 84.7 89.4 92.3 93.6 96.5 98.6 98.2 100.4 102.1 104.0 102.7 103.9 94.8

PWL 85.3 89.4 92.3 93.6 97.7 99.8 98.8 100.4 102.7 104.0 103.9 103.9 95.9

DIAMETER RATIO 8.070 FREQUENCY SHIFT -9

| | | | | | | | |
|-----------|--------------|------------|--------|--------|---------|--------|-------|
| TEST DATE | 03-23-78 | TAPE NO. | N312 | IALPHA | SB59 | TAMB | 51.26 |
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH188 | PAMB | 29.4000 | RELHUM | 63.60 |

| | | | | |
|-------|------------|-------------------------|-------------------------------------|--------------------|
| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
| 0200 | 0219 | 731.5 W (2400.0 FT) SL | 9032.2 50 CM (1400.00 SQ IN) - FULL | 0. M/SEC (0. FPS) |

02/15/80 9.180

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X02200
BACKGROUND FJB300-FMODL X05230

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 78.2 | 82.0 | 82.1 | 82.3 | 83.7 | 85.3 | 87.4 | 89.6 | 91.8 | 99.1 | 103.5 | 109.5 | 106.4 | 141.2 |
| 315 | 79.6 | 82.1 | 83.1 | 83.4 | 85.8 | 87.4 | 87.5 | 89.7 | 94.2 | 101.2 | 105.1 | 111.1 | 106.0 | 142.5 |
| 400 | 81.9 | 83.2 | 84.2 | 83.5 | 85.6 | 87.4 | 88.3 | 91.0 | 95.2 | 104.8 | 108.2 | 112.6 | 105.8 | 144.4 |
| 500 | 82.6 | 84.0 | 85.5 | 85.3 | 86.6 | 88.5 | 90.2 | 91.8 | 96.5 | 106.4 | 109.5 | 112.2 | 102.6 | 144.7 |
| 630 | 80.9 | 84.9 | 86.4 | 86.2 | 88.8 | 90.6 | 91.0 | 94.2 | 98.9 | 106.5 | 109.8 | 111.3 | 99.2 | 144.5 |
| 800 | 85.6 | 85.4 | 86.9 | 87.7 | 89.3 | 91.4 | 92.5 | 96.2 | 100.9 | 107.5 | 109.4 | 109.5 | 96.4 | 144.1 |
| 1000 | 87.4 | 86.2 | 88.2 | 88.5 | 90.1 | 92.5 | 93.9 | 96.8 | 102.5 | 107.8 | 108.2 | 106.6 | 93.0 | 143.4 |
| 1250 | 86.5 | 88.5 | 90.3 | 90.1 | 91.9 | 94.1 | 95.1 | 98.1 | 102.3 | 107.9 | 108.8 | 105.2 | 91.9 | 143.6 |
| 1600 | 88.1 | 87.4 | 89.2 | 90.0 | 91.8 | 94.2 | 95.5 | 98.7 | 102.9 | 107.0 | 108.0 | 103.5 | 91.2 | 143.0 |
| 2000 | 87.2 | 87.7 | 89.5 | 89.8 | 91.3 | 93.5 | 95.3 | 99.5 | 103.5 | 107.3 | 107.0 | 102.3 | 91.5 | 142.8 |
| 2500 | 87.3 | 88.6 | 90.3 | 90.1 | 92.5 | 94.3 | 95.6 | 99.6 | 103.1 | 107.9 | 107.1 | 102.6 | 91.4 | 143.2 |
| 3150 | 88.6 | 89.3 | 89.8 | 91.1 | 93.0 | 95.1 | 96.7 | 101.1 | 103.8 | 106.9 | 106.4 | 102.4 | 91.1 | 143.0 |
| 4000 | 88.9 | 89.1 | 90.9 | 91.2 | 92.5 | 94.9 | 96.5 | 100.4 | 103.2 | 105.5 | 105.5 | 101.7 | 90.4 | 142.2 |
| 5000 | 88.5 | 89.3 | 90.6 | 91.3 | 93.2 | 95.0 | 96.9 | 100.3 | 102.6 | 106.2 | 105.4 | 102.3 | 91.0 | 142.5 |
| 6300 | 90.6 | 89.7 | 90.5 | 90.5 | 93.0 | 95.6 | 96.5 | 100.0 | 102.8 | 105.3 | 105.1 | 102.5 | 92.1 | 142.4 |
| 8000 | 92.2 | 93.4 | 92.5 | 91.6 | 93.1 | 95.0 | 96.1 | 99.4 | 102.4 | 104.8 | 105.0 | 102.0 | 92.5 | 142.6 |
| 10000 | 90.2 | 91.7 | 92.8 | 92.8 | 94.2 | 95.6 | 95.2 | 98.8 | 101.6 | 104.2 | 103.6 | 102.3 | 92.5 | 142.5 |
| 12500 | 87.0 | 89.1 | 90.7 | 91.2 | 93.5 | 94.9 | 94.3 | 98.2 | 98.3 | 102.4 | 101.4 | 100.6 | 91.3 | 141.6 |
| 16000 | 84.8 | 87.1 | 88.4 | 90.1 | 93.0 | 94.4 | 93.2 | 96.4 | 97.8 | 100.7 | 99.0 | 98.3 | 90.2 | 141.3 |
| 20000 | 79.2 | 84.5 | 85.5 | 87.4 | 90.8 | 92.9 | 91.1 | 93.5 | 95.5 | 97.0 | 95.7 | 95.3 | 87.8 | 140.2 |
| 25000 | 77.8 | 80.6 | 82.6 | 83.1 | 88.3 | 89.1 | 87.7 | 89.1 | 92.7 | 92.2 | 91.3 | 91.1 | 85.5 | 138.8 |
| 31500 | 76.2 | 77.0 | 80.4 | 82.4 | 83.2 | 83.9 | 83.9 | 85.6 | 89.2 | 90.5 | 88.7 | 85.8 | 80.4 | 138.6 |
| 40000 | 71.8 | 71.8 | 75.7 | 77.6 | 81.6 | 82.5 | 78.9 | 81.4 | 84.2 | 84.5 | 83.1 | 80.4 | 76.4 | 138.1 |
| 50000 | 65.5 | 67.5 | 68.9 | 71.4 | 74.6 | 75.4 | 74.7 | 74.5 | 79.2 | 77.5 | 76.9 | 75.0 | 70.4 | 136.3 |
| 63000 | 59.9 | 62.8 | 63.7 | 66.4 | 67.4 | 68.4 | 70.1 | 68.8 | 74.1 | 70.0 | 70.5 | 68.3 | 64.3 | 135.7 |
| 80000 | 53.5 | 54.8 | 56.6 | 59.8 | 59.6 | 62.2 | 62.3 | 62.7 | 68.4 | 63.9 | 64.5 | 60.1 | 57.0 | 136.0 |
| OASPL | 100.3 | 101.2 | 102.3 | 102.7 | 104.7 | 106.6 | 107.5 | 110.9 | 114.2 | 118.7 | 119.7 | 120.2 | 112.3 | 156.3 |

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TEST DATE 03-23-78 TAPE NO. N312 1ALPHA S859 TAMB 50.72
LOCATION C41 ANECH CH AERO. RDG. ADH207 PAMB 29.4300 RELHUM 68.60

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 90.22 M/SEC (296.0 FPS)
O200 O220 SIZE

02/15/80 9.180

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X02200

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

OASPL

105.6

105.9

106.3

107.5

108.4

108.1

110.5

114.4

118.1

118.9

120.2

124.5

156.8

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 296.00 REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-23-78 TAPE NO. N312 ALPHA SB59 TAMB 50.72
 LOCATION C41 ANECH CH AERO. RDG. ADH207 PAMB 29.4300 RELHJM 68.60

MODEL TEST POINT 0220 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SO CM (21.49 SO IN) - MODEL 90.22 M/SEC (296.0 FPS) FREE-JET SPEED

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X02201

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 63.8 | 67.0 | 68.0 | 67.9 | 69.3 | 70.1 | 70.1 | 71.5 | 76.5 | 84.9 | 86.5 | 88.1 | 77.8 | 161.9 |
| 63 | 65.8 | 67.8 | 69.0 | 69.8 | 70.4 | 71.2 | 71.9 | 72.4 | 78.8 | 85.0 | 87.0 | 87.8 | 75.8 | 161.9 |
| 80 | 66.8 | 68.8 | 70.4 | 70.7 | 72.5 | 73.4 | 72.7 | 74.6 | 80.9 | 86.1 | 86.8 | 86.8 | 74.9 | 161.8 |
| 100 | 65.0 | 69.6 | 71.2 | 72.2 | 73.0 | 74.1 | 74.1 | 76.5 | 82.5 | 86.5 | 85.7 | 84.4 | 72.9 | 161.0 |
| 125 | 69.6 | 70.0 | 71.7 | 73.0 | 73.8 | 75.2 | 75.4 | 76.9 | 82.2 | 86.4 | 86.0 | 82.6 | 71.2 | 160.8 |
| 160 | 71.2 | 70.7 | 72.9 | 74.5 | 75.6 | 76.8 | 76.6 | 78.1 | 82.8 | 85.4 | 85.0 | 80.5 | 70.0 | 160.4 |
| 200 | 70.0 | 72.9 | 74.8 | 74.2 | 75.4 | 76.8 | 77.0 | 78.7 | 83.3 | 85.6 | 83.9 | 78.9 | 69.6 | 160.3 |
| 250 | 71.2 | 71.5 | 73.5 | 73.9 | 74.9 | 76.1 | 76.7 | 79.4 | 82.8 | 86.2 | 83.9 | 79.1 | 69.0 | 160.7 |
| 315 | 70.0 | 71.4 | 73.5 | 74.1 | 75.9 | 76.9 | 78.0 | 79.4 | 83.6 | 85.1 | 83.1 | 78.7 | 68.4 | 160.7 |
| 400 | 69.6 | 71.9 | 74.1 | 74.9 | 76.3 | 77.5 | 77.9 | 80.8 | 83.0 | 83.8 | 82.1 | 77.9 | 67.4 | 160.6 |
| 500 | 70.3 | 72.3 | 73.3 | 74.9 | 75.8 | 77.4 | 77.8 | 80.2 | 82.6 | 84.6 | 82.2 | 78.6 | 67.9 | 161.3 |
| 630 | 70.0 | 71.7 | 74.1 | 74.9 | 76.4 | 77.6 | 78.3 | 80.2 | 83.2 | 84.1 | 82.3 | 79.1 | 69.0 | 162.1 |
| 800 | 69.1 | 71.5 | 73.5 | 74.1 | 76.4 | 78.4 | 78.2 | 80.1 | 83.0 | 83.6 | 82.1 | 78.1 | 68.4 | 162.4 |
| 1000 | 70.6 | 71.5 | 73.2 | 75.2 | 76.8 | 78.3 | 78.2 | 80.0 | 82.3 | 83.1 | 80.6 | 78.2 | 67.6 | 162.7 |
| 1250 | 71.0 | 74.4 | 74.8 | 76.6 | 77.9 | 78.9 | 77.3 | 79.2 | 79.6 | 81.3 | 78.3 | 76.1 | 65.4 | 162.3 |
| 1600 | 68.4 | 72.3 | 74.8 | 75.5 | 77.3 | 77.9 | 76.1 | 78.4 | 78.8 | 79.7 | 75.7 | 73.1 | 62.6 | 162.2 |
| 2000 | 65.6 | 70.2 | 73.0 | 74.1 | 76.7 | 77.4 | 75.0 | 76.4 | 76.9 | 76.2 | 72.2 | 69.3 | 57.9 | 161.8 |
| 2500 | 61.2 | 66.6 | 69.5 | 70.7 | 74.0 | 75.3 | 72.6 | 73.3 | 74.5 | 71.5 | 67.3 | 63.3 | 51.7 | 161.1 |
| 3150 | 51.7 | 60.9 | 64.1 | 64.9 | 70.0 | 70.2 | 68.0 | 67.8 | 69.0 | 67.1 | 61.0 | 52.9 | 38.4 | 159.9 |
| 4000 | 43.2 | 51.5 | 56.5 | 60.9 | 62.0 | 62.1 | 60.9 | 60.3 | 61.7 | 58.1 | 51.0 | 40.4 | 21.4 | 159.2 |
| 5000 | 31.1 | 39.5 | 47.3 | 50.7 | 55.4 | 55.8 | 51.2 | 51.3 | 51.0 | 43.9 | 35.5 | 21.8 | 159.1 | |
| 6300 | 8.5 | 19.7 | 30.1 | 33.7 | 38.3 | 38.9 | 37.0 | 33.7 | 34.9 | 23.4 | 12.4 | | 157.8 | |
| 8000 | | | 1.0 | 9.4 | 13.0 | 14.1 | 14.2 | 8.8 | 8.9 | | | | 157.5 | |
| 10000 | | | | | | | | | | | | | 156.1 | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|-------|-------|------|------|------|-------|
| OASPL | 81.6 | 83.7 | 85.5 | 86.5 | 88.0 | 89.2 | 88.9 | 90.9 | 94.2 | 96.9 | 96.1 | 94.7 | 83.7 | 174.7 |
| PNL | 88.2 | 91.6 | 94.1 | 95.2 | 97.4 | 98.3 | 97.0 | 98.6 | 100.6 | 101.8 | 99.5 | 96.3 | 85.1 | |
| PNLT | 89.3 | 91.6 | 94.7 | 95.2 | 98.6 | 99.5 | 97.0 | 98.6 | 101.2 | 101.8 | 99.5 | 96.3 | 85.1 | |

DIAMETER RATIO 8.070 FREQUENCY SHIFT -9

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 50.72
LOCATION C41 ANECH CH AERO. RDG. ADH207 PAMB 29.4300 RELNUM 68.60

MODEL TEST POINT 0200 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 90.22 M/SEC (296.0 FPS) FREE-JET SPEED

02/15/80 9.180

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X02210
BACKGROUND FJB400-FMODL X05220

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250 78.5 81.1 81.3 81.6 82.7 84.1 86.3 88.5 90.5 97.6 102.3 108.2 105.1 139.9

315 79.2 81.0 81.7 81.7 83.6 85.5 86.6 88.3 92.9 100.0 103.9 109.6 104.5 141.1

400 81.3 82.1 82.8 82.0 84.4 86.3 87.2 89.9 94.4 103.5 106.7 110.3 102.2 142.4

500 81.3 82.9 85.5 83.9 85.0 86.9 88.6 90.5 95.5 105.3 108.2 109.9 99.1 143.0

630 84.1 85.1 85.1 87.1 88.8 90.2 92.9 98.1 105.7 108.6 108.0 95.7 142.7

800 84.8 84.1 85.9 87.1 87.4 90.1 91.0 94.4 99.9 106.5 108.4 105.3 93.4 142.4

1000 85.4 84.7 86.7 86.7 88.5 90.9 92.3 95.7 101.5 107.0 106.9 102.1 91.0 142.0

1250 85.2 87.5 88.5 88.6 89.9 92.0 93.7 97.1 101.3 106.9 106.3 100.9 91.6 141.8

1600 86.5 86.1 87.9 88.7 90.3 92.9 94.0 98.0 102.4 106.2 106.2 99.5 89.9 141.7

2000 86.2 86.7 88.2 88.2 90.1 92.4 94.6 98.5 102.2 106.6 104.8 98.5 90.0 141.4

2500 86.3 88.1 88.8 89.4 91.2 92.8 95.4 98.6 102.1 107.2 103.9 99.4 89.6 141.6

3150 86.8 87.8 89.3 89.8 91.7 94.3 95.7 99.4 103.1 105.7 103.4 99.1 89.6 141.3

4000 88.1 88.9 90.2 89.7 91.5 93.9 95.5 98.7 101.7 105.0 103.0 99.2 89.2 140.8

5000 87.5 88.0 89.6 90.3 92.1 94.5 95.9 99.8 102.1 105.2 102.9 98.8 89.0 141.2

6300 89.1 88.7 90.2 90.2 91.7 95.1 95.8 99.0 101.6 103.8 102.1 99.2 89.9 140.7

8000 92.0 92.3 92.0 90.8 92.1 94.0 95.6 98.4 101.4 103.5 101.8 99.2 91.0 141.0

10000 89.4 90.9 93.0 91.8 93.2 94.8 94.2 98.5 100.3 103.2 100.8 99.6 90.4 141.1

12500 86.7 88.6 90.2 91.0 92.5 93.8 93.3 96.5 98.6 100.6 98.6 98.3 90.0 140.1

16000 84.3 86.4 89.2 89.4 91.7 93.7 92.1 95.1 96.8 99.7 96.5 96.8 89.2 140.1

20000 79.2 84.2 85.5 86.7 90.6 92.1 89.8 92.3 94.5 95.8 93.7 93.8 87.2 139.1

25000 77.5 81.1 82.3 82.6 87.8 88.6 87.0 87.9 91.9 91.0 89.3 89.1 89.5 137.9

31500 75.9 77.0 79.9 81.9 82.7 83.4 83.6 85.1 88.2 88.5 86.2 84.0 79.4 137.4

40000 72.3 72.1 76.0 77.1 81.6 82.0 78.4 79.9 83.4 82.5 81.4 78.7 75.4 137.1

50000 65.8 68.0 69.4 71.7 73.8 75.4 74.0 73.5 78.2 75.7 74.9 73.5 69.4 135.4

63000 60.7 62.8 64.0 65.9 67.1 68.7 69.8 68.0 73.1 68.2 68.0 67.3 64.3 134.9

80000 54.5 55.3 56.4 59.8 58.9 61.4 61.6 61.9 66.8 62.1 62.2 58.8 55.7 134.9

DASPL 99.3 100.3 101.7 101.7 103.5 105.6 105.4 109.8 113.2 117.7 117.8 117.6 110.3 154.8

TEST DATE 03-23-78 TAPE NO. N312 ALPHA SB59 TAMB 50.72
LOCATION C41 ANECH CH AERO. RDG. ADH206 PAMB 29.4300 RELHUM 68.60

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
0200 0221 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 120.70 M/SEC (396.0 FPS)

02/15/80 9.180

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X02210

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 85.0 | 86.6 | 85.6 | 84.5 | 84.1 | 84.1 | 84.4 | 84.9 | 89.4 | 95.6 | 92.0 | 105.2 | 101.9 | 137.1 |
| 315 | 85.0 | 86.6 | 85.6 | 84.5 | 85.4 | 85.7 | 85.3 | 85.6 | 92.4 | 100.9 | 103.8 | 108.3 | 102.7 | 140.3 |
| 400 | 86.7 | 87.3 | 86.6 | 85.1 | 86.0 | 86.6 | 86.4 | 88.1 | 93.7 | 103.1 | 106.1 | 109.3 | 102.0 | 141.8 |
| 500 | 87.8 | 87.7 | 87.3 | 85.1 | 86.7 | 87.2 | 87.7 | 88.6 | 96.3 | 103.5 | 106.6 | 108.2 | 100.6 | 141.6 |
| 630 | 88.0 | 88.7 | 90.0 | 87.1 | 89.1 | 89.2 | 89.3 | 90.8 | 98.2 | 104.5 | 106.8 | 105.6 | 100.9 | 141.6 |
| 800 | 90.6 | 90.4 | 90.0 | 88.5 | 89.4 | 90.6 | 90.1 | 92.3 | 100.1 | 105.4 | 105.8 | 104.4 | 100.7 | 141.3 |
| 1000 | 92.4 | 90.5 | 90.9 | 90.7 | 90.7 | 91.6 | 91.5 | 93.6 | 100.1 | 105.4 | 105.4 | 103.5 | 101.6 | 141.2 |
| 1250 | 93.0 | 91.1 | 91.7 | 90.3 | 92.1 | 92.8 | 93.0 | 95.1 | 101.3 | 104.8 | 105.3 | 101.7 | 99.6 | 141.0 |
| 1600 | 92.8 | 93.9 | 93.7 | 92.3 | 92.7 | 93.9 | 93.6 | 96.1 | 101.4 | 105.4 | 104.1 | 101.0 | 99.8 | 141.1 |
| 2000 | 94.1 | 92.6 | 93.1 | 92.5 | 92.7 | 93.7 | 94.4 | 97.0 | 101.6 | 106.4 | 103.6 | 102.3 | 99.8 | 141.6 |
| 2500 | 93.8 | 93.2 | 93.5 | 92.2 | 94.1 | 94.4 | 95.6 | 97.4 | 103.2 | 105.5 | 103.8 | 102.9 | 100.8 | 141.9 |
| 3150 | 93.9 | 94.6 | 94.2 | 93.5 | 94.9 | 96.3 | 96.3 | 98.7 | 102.5 | 105.4 | 104.0 | 103.5 | 100.9 | 142.2 |
| 4000 | 94.3 | 94.4 | 94.8 | 94.2 | 95.1 | 96.4 | 96.6 | 98.6 | 102.9 | 105.7 | 103.8 | 102.9 | 100.5 | 142.3 |
| 5000 | 95.6 | 95.5 | 95.8 | 94.3 | 96.1 | 97.5 | 97.4 | 99.9 | 102.8 | 104.8 | 103.7 | 104.1 | 102.2 | 142.7 |
| 6300 | 94.9 | 94.7 | 95.3 | 95.1 | 95.7 | 98.1 | 97.3 | 99.2 | 103.0 | 104.9 | 103.8 | 104.7 | 103.8 | 143.1 |
| 8000 | 96.3 | 95.2 | 95.8 | 94.8 | 95.9 | 97.0 | 97.2 | 98.8 | 102.2 | 104.9 | 103.2 | 105.3 | 103.5 | 143.4 |
| 10000 | 97.5 | 97.7 | 96.7 | 94.9 | 97.2 | 97.8 | 95.9 | 99.0 | 101.5 | 103.3 | 102.0 | 104.9 | 103.7 | 143.6 |
| 12500 | 96.2 | 97.0 | 98.2 | 96.1 | 96.5 | 96.8 | 95.5 | 97.6 | 100.4 | 103.1 | 100.4 | 103.8 | 103.2 | 143.7 |
| 16000 | 93.0 | 94.1 | 94.9 | 94.7 | 95.3 | 96.7 | 94.5 | 96.5 | 98.7 | 99.3 | 97.4 | 100.3 | 100.5 | 142.7 |
| 20000 | 92.9 | 93.7 | 95.1 | 93.8 | 95.1 | 95.1 | 92.2 | 93.9 | 94.9 | 93.5 | 92.1 | 94.8 | 102.2 | 142.4 |
| 25000 | 87.2 | 91.0 | 90.9 | 90.5 | 92.3 | 91.6 | 88.4 | 87.9 | 94.0 | 93.9 | 91.8 | 92.6 | 94.9 | 141.5 |
| 31500 | 84.7 | 87.0 | 86.9 | 85.6 | 86.7 | 86.4 | 86.0 | 86.8 | 88.0 | 86.6 | 85.8 | 86.1 | 89.7 | 139.8 |
| 40000 | 79.5 | 79.9 | 82.0 | 82.9 | 86.2 | 85.0 | 79.8 | 79.9 | 83.1 | 80.2 | 79.7 | 81.3 | 84.1 | 139.6 |
| 50000 | 78.3 | 76.8 | 79.3 | 78.9 | 78.4 | 78.4 | 75.4 | 73.6 | 79.0 | 73.7 | 73.8 | 76.0 | 79.9 | 139.0 |
| 63000 | 70.8 | 71.8 | 71.8 | 72.5 | 71.1 | 71.7 | 71.2 | 68.1 | 76.6 | 71.5 | 71.7 | 71.1 | 74.7 | 139.1 |
| 80000 | 61.5 | 62.9 | 63.2 | 64.1 | 62.9 | 64.4 | 64.1 | 63.9 | 66.8 | 61.7 | 61.9 | 61.3 | 64.9 | 137.3 |
| OASPL | 106.5 | 106.6 | 106.9 | 105.8 | 107.0 | 107.9 | 107.3 | 109.4 | 113.6 | 117.2 | 117.0 | 117.9 | 114.8 | 155.7 |

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 396.00 REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-23-78 TAPE NO. N312 IALPHA SB59 TAMB 50.72
 LOCATION C41 ANECH CH AERO. RDG. ADH206 PAMB 29.4300 RELHUM 68.60

MODEL TEST POINT 0200 0221 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL 120.70 M/SEC (396.0 FPS) FREE-JET SPEED

02/15/80 9.180

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X02211

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 65.4 | 67.5 | 67.9 | 67.1 | 66.5 | 69.1 | 68.8 | 70.1 | 75.0 | 83.4 | 84.8 | 85.8 | 75.2 | 159.9 |
| 63 | 66.5 | 67.9 | 68.6 | 67.1 | 69.1 | 69.8 | 70.1 | 70.6 | 77.5 | 83.7 | 85.3 | 84.6 | 73.7 | 159.7 |
| 80 | 66.6 | 68.8 | 71.3 | 69.1 | 71.4 | 71.7 | 71.6 | 72.7 | 79.5 | 84.7 | 85.5 | 83.0 | 73.9 | 159.7 |
| 100 | 69.2 | 70.5 | 71.2 | 70.5 | 71.8 | 73.1 | 72.4 | 74.2 | 81.3 | 85.5 | 84.4 | 80.7 | 73.6 | 159.4 |
| 125 | 70.8 | 70.5 | 72.0 | 72.5 | 72.9 | 74.0 | 73.8 | 75.5 | 81.2 | 85.4 | 83.8 | 79.6 | 74.2 | 159.4 |
| 160 | 71.2 | 70.9 | 72.7 | 72.0 | 74.3 | 75.1 | 75.2 | 76.9 | 82.3 | 84.6 | 83.5 | 77.6 | 71.8 | 159.2 |
| 200 | 70.8 | 73.6 | 74.4 | 73.8 | 74.7 | 76.0 | 75.5 | 77.7 | 82.2 | 83.0 | 82.1 | 76.6 | 71.6 | 159.3 |
| 250 | 71.8 | 72.0 | 73.6 | 73.8 | 74.5 | 75.6 | 76.1 | 78.3 | 82.2 | 85.7 | 81.2 | 77.4 | 70.9 | 159.7 |
| 315 | 71.0 | 72.2 | 73.7 | 73.2 | 75.6 | 76.0 | 77.1 | 78.5 | 83.5 | 84.6 | 81.0 | 77.5 | 71.2 | 160.0 |
| 400 | 70.6 | 73.2 | 74.1 | 74.2 | 76.1 | 77.7 | 77.5 | 79.4 | 82.4 | 84.2 | 80.7 | 77.4 | 70.2 | 160.3 |
| 500 | 70.6 | 72.6 | 74.4 | 74.6 | 76.0 | 77.5 | 77.6 | 79.0 | 82.5 | 83.9 | 80.0 | 76.2 | 68.8 | 160.5 |
| 630 | 71.3 | 73.4 | 75.1 | 74.4 | 76.8 | 78.3 | 78.0 | 80.1 | 82.0 | 82.6 | 79.5 | 76.7 | 69.5 | 160.9 |
| 800 | 70.1 | 72.2 | 74.3 | 75.0 | 76.1 | 78.7 | 77.7 | 79.1 | 81.9 | 82.4 | 79.1 | 76.6 | 69.9 | 161.3 |
| 1000 | 71.2 | 72.4 | 74.6 | 74.6 | 76.2 | 77.5 | 77.5 | 78.5 | 80.9 | 82.1 | 78.0 | 76.5 | 68.4 | 161.5 |
| 1250 | 71.9 | 74.5 | 75.2 | 74.4 | 77.3 | 78.1 | 78.0 | 78.5 | 80.0 | 80.2 | 76.3 | 75.3 | 67.2 | 161.7 |
| 1600 | 69.7 | 73.2 | 76.3 | 75.3 | 76.3 | 76.9 | 75.3 | 76.8 | 78.5 | 79.3 | 73.9 | 72.9 | 64.4 | 161.9 |
| 2000 | 65.5 | 69.7 | 72.5 | 73.6 | 76.0 | 76.6 | 74.2 | 75.4 | 76.3 | 74.9 | 69.9 | 67.8 | 58.7 | 160.9 |
| 2500 | 63.6 | 68.1 | 71.9 | 72.1 | 74.3 | 74.5 | 71.4 | 72.2 | 71.7 | 67.9 | 62.8 | 59.5 | 55.4 | 160.6 |
| 3150 | 54.5 | 62.9 | 65.8 | 67.2 | 70.1 | 69.7 | 66.2 | 64.6 | 68.9 | 65.8 | 59.2 | 52.3 | 39.7 | 159.7 |
| 4000 | 45.8 | 54.3 | 58.0 | 59.1 | 61.5 | 61.6 | 60.8 | 60.3 | 59.1 | 53.9 | 46.9 | 36.8 | 20.0 | 157.9 |
| 5000 | 30.9 | 39.6 | 46.8 | 51.0 | 55.9 | 55.3 | 49.6 | 48.0 | 48.0 | 39.9 | 31.1 | 18.3 | | 157.8 |
| 6300 | 11.8 | 22.3 | 32.1 | 36.2 | 38.1 | 38.9 | 35.1 | 30.8 | 31.8 | 19.1 | 7.3 | | | 157.1 |
| 8000 | | | 3.2 | 10.6 | 12.7 | 14.4 | 12.8 | 6.1 | 8.1 | | | | | 155.5 |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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|-------|------|------|------|------|------|------|------|------|------|-------|------|------|------|-------|
| DASPL | 82.5 | 84.3 | 86.1 | 85.8 | 87.6 | 88.7 | 88.1 | 89.7 | 93.4 | 96.0 | 94.3 | 92.0 | 83.8 | 173.7 |
| PWL | 89.3 | 92.4 | 95.0 | 94.9 | 97.0 | 97.7 | 96.1 | 97.4 | 99.8 | 100.9 | 97.4 | 94.6 | 86.5 | |
| PWLT | 89.3 | 92.4 | 95.7 | 95.5 | 98.4 | 98.8 | 96.1 | 97.4 | 99.8 | 102.0 | 97.4 | 94.6 | 87.8 | |

DIAMETER RATIO 8.070 FREQUENCY SHIFT -9

| | | | | | | | |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| TEST DATE | 03-23-78 | TAPE NO. | N312 | ALPHA | SB59 | TAMB | 50.72 |
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH206 | PAMB | 29.4300 | RELHUM | 68.60 |

| | | | | |
|-------|------------|-------------------------|-------------------------------------|---------------------------|
| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
| O200 | O221 | 731.5 M (2400.0 FT) SL | 9032.2 SQ CM (1400.00 SQ IN) - FULL | 120.70 M/SEC (396.0 FPS) |

02/15/80 9.180

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X0220
BACKGROUND FJB400-FMODL X05220

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 84.0 | 88.3 | 88.0 | 87.8 | 88.4 | 90.5 | 93.2 | 95.1 | 97.8 | 103.9 | 108.5 | 114.5 | 111.6 | 146.2 |
| 315 | 84.8 | 87.4 | 87.9 | 87.9 | 90.8 | 93.1 | 93.8 | 95.9 | 99.7 | 106.2 | 110.4 | 116.1 | 112.5 | 147.8 |
| 400 | 87.4 | 88.4 | 89.7 | 89.2 | 90.5 | 92.7 | 94.0 | 96.2 | 100.9 | 110.0 | 113.2 | 118.3 | 113.0 | 150.0 |
| 500 | 87.1 | 89.7 | 91.0 | 90.8 | 91.6 | 94.3 | 95.1 | 96.8 | 102.3 | 111.4 | 114.7 | 118.9 | 113.6 | 151.0 |
| 630 | 87.8 | 90.6 | 92.1 | 91.6 | 93.2 | 95.6 | 96.2 | 99.4 | 104.1 | 111.9 | 115.1 | 119.3 | 114.4 | 151.5 |
| 800 | 92.1 | 91.1 | 93.1 | 93.9 | 94.0 | 96.6 | 97.8 | 100.9 | 105.6 | 112.7 | 115.1 | 119.8 | 114.9 | 152.0 |
| 1000 | 95.7 | 95.2 | 96.5 | 94.8 | 95.8 | 98.0 | 99.1 | 102.0 | 107.2 | 112.5 | 114.7 | 119.6 | 114.8 | 151.9 |
| 1250 | 93.3 | 96.3 | 97.1 | 96.8 | 98.4 | 99.8 | 100.4 | 103.1 | 107.6 | 113.1 | 115.5 | 120.7 | 114.9 | 152.7 |
| 1600 | 94.8 | 94.4 | 95.4 | 96.0 | 97.3 | 99.4 | 101.0 | 103.5 | 108.9 | 113.2 | 114.7 | 119.7 | 114.2 | 152.2 |
| 2000 | 96.0 | 96.2 | 97.2 | 95.5 | 96.3 | 98.2 | 100.1 | 103.5 | 108.7 | 112.5 | 114.8 | 118.5 | 111.5 | 151.3 |
| 2500 | 94.6 | 96.1 | 97.3 | 97.1 | 97.7 | 99.8 | 101.5 | 104.6 | 107.8 | 113.4 | 114.9 | 117.6 | 110.4 | 151.2 |
| 3150 | 96.3 | 97.1 | 97.1 | 96.6 | 97.4 | 100.1 | 101.7 | 105.4 | 108.6 | 112.7 | 114.6 | 116.1 | 109.1 | 150.6 |
| 4000 | 95.9 | 96.4 | 97.4 | 95.9 | 97.7 | 99.9 | 101.5 | 104.4 | 107.9 | 111.5 | 113.2 | 114.6 | 108.4 | 149.5 |
| 5000 | 95.0 | 96.8 | 97.1 | 96.8 | 97.6 | 100.0 | 101.6 | 104.8 | 107.6 | 111.7 | 111.8 | 113.8 | 107.5 | 149.1 |
| 6300 | 93.3 | 96.9 | 97.9 | 96.9 | 97.7 | 100.3 | 101.2 | 104.4 | 106.8 | 110.5 | 110.9 | 112.7 | 107.1 | 148.5 |
| 8000 | 92.2 | 97.0 | 97.9 | 97.3 | 98.3 | 100.2 | 100.8 | 103.9 | 106.6 | 109.0 | 109.5 | 111.4 | 106.4 | 147.9 |
| 10000 | 89.4 | 94.6 | 97.0 | 97.0 | 98.6 | 100.5 | 99.9 | 103.5 | 105.5 | 108.2 | 107.5 | 111.3 | 105.4 | 147.7 |
| 12500 | 86.6 | 92.0 | 94.1 | 95.1 | 97.1 | 99.3 | 99.2 | 101.6 | 103.0 | 105.8 | 105.5 | 109.2 | 102.9 | 146.4 |
| 15000 | 84.4 | 90.5 | 92.8 | 93.5 | 96.8 | 98.3 | 97.5 | 100.2 | 101.4 | 104.3 | 103.3 | 106.7 | 101.3 | 146.0 |
| 20000 | 78.8 | 87.8 | 89.3 | 91.5 | 95.4 | 96.7 | 94.4 | 97.1 | 99.3 | 101.3 | 100.5 | 104.2 | 98.8 | 145.2 |
| 25000 | 77.3 | 84.3 | 86.4 | 87.6 | 92.6 | 93.7 | 91.5 | 92.2 | 96.7 | 97.0 | 97.1 | 100.1 | 96.6 | 144.0 |
| 31500 | 75.0 | 80.5 | 84.7 | 86.4 | 87.2 | 87.9 | 87.9 | 89.9 | 93.0 | 95.7 | 93.9 | 95.3 | 92.0 | 143.7 |
| 40000 | 70.6 | 74.8 | 79.4 | 81.1 | 85.6 | 87.0 | 82.9 | 84.9 | 88.7 | 91.2 | 90.8 | 90.9 | 88.2 | 143.8 |
| 50000 | 63.8 | 69.7 | 72.3 | 75.2 | 77.6 | 79.5 | 78.3 | 78.5 | 84.4 | 84.9 | 84.4 | 85.6 | 83.5 | 142.3 |
| 63000 | 58.2 | 65.1 | 66.2 | 69.1 | 69.4 | 71.2 | 72.6 | 72.3 | 80.3 | 79.4 | 78.2 | 80.8 | 77.6 | 142.2 |
| 80000 | 52.8 | 58.5 | 60.9 | 64.3 | 63.4 | 65.9 | 65.3 | 65.9 | 73.8 | 73.5 | 74.4 | 73.6 | 71.5 | 143.0 |
| OASPL | 105.6 | 107.4 | 108.5 | 108.1 | 109.5 | 111.5 | 112.4 | 115.4 | 119.0 | 123.9 | 125.9 | 129.9 | 124.5 | 163.3 |

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| | | | | | | | |
|-----------|--------------|------------|--------|--------|---------|--------|-------|
| TEST DATE | 03-23-78 | TAPE NO. | N312 | IALPHA | SB59 | TAMB | 46.94 |
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH210 | PAMB | 29.4400 | RELHJM | 80.30 |

| | | | | |
|-------|------------|-----------------------|------------------------------------|--------------------|
| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
| O200 | O222 | 12.2 M (40.0 FT) ARC | 138.7 SQ CM (21.49 SQ IN) - MODEL | O. M/SEC (O. FPS) |

02/15/80 9.180

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X02220

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

DASPL

105.6

107.4

108.5

108.1

109.5

111.5

112.4

115.4

119.0

123.9

125.9

129.9

143.5

163.3

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) FREE JET DIAMETER (IN) 0. 48.00 REFRACTION CORRECTION - YES TURBULANCE CORRECTION - YES

TEST DATE 03-23-78 LOCATION C41 ANECH CH TAPE NO. N312 AERO. RDG. ADH210 IALPHA SB59 PAMB 29.4400 TAMB 46.94 RELHUM 80.30

MODEL TEST POINT 0200 0222 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 138.7 SQ CM (21.49 SQ IN) - MODEL SIZE FREE-JET SPEED O. M/SEC (O. FPS)

02/15/80 9.180

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMDDL X02221

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 66.1 | 68.6 | 71.0 | 71.2 | 73.0 | 75.2 | 76.5 | 78.2 | 82.3 | 90.3 | 91.9 | 94.8 | 86.2 | 168.2 |
| 63 | 65.8 | 70.0 | 72.3 | 72.8 | 74.0 | 76.8 | 77.5 | 78.8 | 83.6 | 91.6 | 93.4 | 95.4 | 86.7 | 169.1 |
| 80 | 66.4 | 70.8 | 73.4 | 73.6 | 75.6 | 78.1 | 78.6 | 81.4 | 85.4 | 92.1 | 93.7 | 95.7 | 87.4 | 169.6 |
| 100 | 70.6 | 71.2 | 74.3 | 75.8 | 76.3 | 79.1 | 80.1 | 82.8 | 86.8 | 92.8 | 93.6 | 96.1 | 87.8 | 170.1 |
| 125 | 74.1 | 75.2 | 77.6 | 76.6 | 78.1 | 80.4 | 81.4 | 83.8 | 88.3 | 92.6 | 93.1 | 95.7 | 87.4 | 170.0 |
| 160 | 71.5 | 76.1 | 78.0 | 78.6 | 80.6 | 82.1 | 82.6 | 84.8 | 88.5 | 93.0 | 93.7 | 96.6 | 87.1 | 170.9 |
| 200 | 72.8 | 74.0 | 76.2 | 77.5 | 79.3 | 81.5 | 83.0 | 85.0 | 89.7 | 92.9 | 92.7 | 95.3 | 86.0 | 170.3 |
| 250 | 73.6 | 75.6 | 77.8 | 76.8 | 78.1 | 80.1 | 81.9 | 84.8 | 89.3 | 91.9 | 92.4 | 93.6 | 82.6 | 169.5 |
| 315 | 71.8 | 75.1 | 77.6 | 78.2 | 79.2 | 81.5 | 83.0 | 85.7 | 88.1 | 92.4 | 92.1 | 92.2 | 80.7 | 169.3 |
| 400 | 73.0 | 75.7 | 77.0 | 77.3 | 78.6 | 81.4 | 82.9 | 86.1 | 88.5 | 91.3 | 91.4 | 90.0 | 78.4 | 168.7 |
| 500 | 72.1 | 74.6 | 77.0 | 76.4 | 78.7 | 81.0 | 82.4 | 84.9 | 87.5 | 89.7 | 89.5 | 87.9 | 76.7 | 167.7 |
| 630 | 70.7 | 74.6 | 76.3 | 76.9 | 78.3 | 80.8 | 82.3 | 85.0 | 86.8 | 89.5 | 87.6 | 86.4 | 74.8 | 167.3 |
| 800 | 68.6 | 74.4 | 76.9 | 76.8 | 78.1 | 80.9 | 81.7 | 84.3 | 85.7 | 88.0 | 86.1 | 84.6 | 73.3 | 166.6 |
| 1000 | 67.0 | 74.2 | 76.6 | 77.0 | 78.6 | 80.7 | 81.1 | 83.6 | 85.3 | 86.1 | 84.3 | 82.7 | 71.4 | 166.0 |
| 1250 | 63.7 | 71.4 | 75.4 | 76.6 | 78.7 | 80.8 | 80.0 | 83.0 | 84.0 | 85.0 | 81.8 | 81.7 | 68.9 | 165.8 |
| 1600 | 60.1 | 68.2 | 72.1 | 74.3 | 77.0 | 79.3 | 79.1 | 80.8 | 81.0 | 82.0 | 79.0 | 78.3 | 64.1 | 164.6 |
| 2000 | 56.9 | 66.1 | 70.5 | 72.4 | 76.5 | 78.2 | 77.2 | 79.2 | 79.1 | 79.9 | 75.8 | 74.1 | 59.5 | 164.1 |
| 2500 | 49.5 | 62.2 | 66.1 | 69.8 | 74.5 | 76.1 | 73.5 | 75.4 | 76.1 | 75.7 | 71.2 | 68.8 | 52.1 | 163.3 |
| 3150 | 44.7 | 56.3 | 61.3 | 64.4 | 70.3 | 71.7 | 69.3 | 68.9 | 71.6 | 68.9 | 64.5 | 59.8 | 41.5 | 162.2 |
| 4000 | 36.1 | 47.7 | 55.8 | 59.9 | 62.0 | 63.1 | 62.7 | 63.4 | 64.1 | 63.0 | 55.0 | 46.0 | 22.3 | 161.9 |
| 5000 | 21.9 | 34.5 | 44.3 | 49.2 | 55.4 | 57.3 | 52.7 | 53.0 | 53.5 | 50.9 | 42.2 | 28.0 | | 162.0 |
| 6300 | 15.2 | 25.1 | 32.5 | 37.3 | 39.9 | 37.9 | 37.0 | 35.8 | 37.2 | 30.4 | 18.0 | | 160.4 | |
| 8000 | | | 7.1 | 10.9 | 13.9 | 14.1 | 10.3 | 11.8 | 0.1 | | | | 160.3 | |
| 10000 | | | | | | | | | | | | | 161.2 | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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|-------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| OASPL | 82.7 | 85.9 | 88.2 | 88.6 | 90.4 | 92.6 | 93.5 | 96.0 | 99.0 | 103.0 | 103.4 | 105.1 | 96.0 | 181.2 |
| PNL | 86.8 | 91.2 | 94.2 | 95.6 | 98.5 | 100.6 | 100.4 | 102.5 | 104.5 | 107.4 | 106.6 | 107.1 | 96.7 | |
| PNLT | 87.3 | 91.2 | 94.2 | 95.6 | 99.8 | 101.9 | 100.9 | 102.5 | 105.1 | 107.9 | 107.9 | 107.1 | 96.7 | |

DIAMETER RATIO 8.070 FREQUENCY SHIFT -9

| | | | | | | | |
|-----------|--------------|------------|--------|--------|---------|--------|-------|
| TEST DATE | O3-23-78 | TAPE NO. | N312 | IALPHA | SB59 | TAMB | 46.94 |
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH210 | PAMB | 29.4400 | RELHUM | 80.30 |

| | | | | |
|-------|------------|-------------------------|-------------------------------------|--------------------|
| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
| O200 | O222 | 731.5 M (2400.0 FT) SL | 9032.2 SQ CM (1400.00 SQ IN) - FULL | O. M/SEC (O. FPS) |

6.1.4 Measured Acoustic Data for Model 3

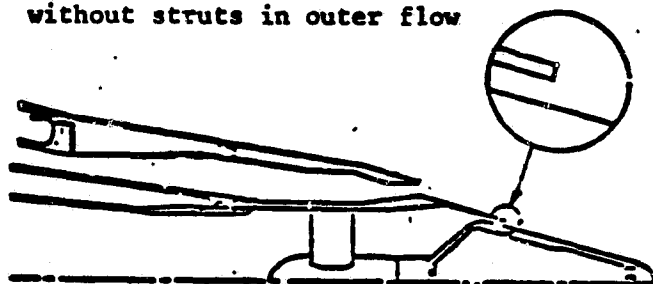
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$R_T^0 = 0.853$ conic outer nozzle

$R_T^0 = 0.933$ conic inner nozzle

$A^1/A^0 = 0.194$

without struts in outer flow



UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL: FJ-ZER-FWDL X03010
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 64.3 | 91.1 | 91.1 | 90.9 | 91.7 | 93.6 | 96.7 | 98.6 | 100.6 | 107.6 | 112.0 | 115.7 | 115.4 | 146.8 |
| 315 | 67.4 | 89.7 | 90.7 | 91.2 | 94.1 | 95.4 | 96.1 | 98.7 | 102.7 | 109.7 | 113.6 | 117.3 | 115.2 | 150.2 |
| 400 | 70.9 | 91.2 | 92.5 | 91.5 | 93.3 | 95.0 | 96.6 | 99.2 | 104.0 | 113.5 | 116.9 | 118.8 | 116.3 | 152.2 |
| 500 | 73.2 | 91.8 | 93.8 | 93.1 | 94.4 | 96.3 | 97.7 | 100.1 | 105.5 | 115.1 | 118.7 | 119.7 | 116.8 | 153.5 |
| 630 | 76.3 | 93.1 | 94.9 | 94.2 | 97.3 | 99.0 | 102.4 | 107.4 | 116.0 | 120.1 | 119.6 | 117.2 | 154.3 | |
| 800 | 82.4 | 94.1 | 95.9 | 96.0 | 97.5 | 98.9 | 100.5 | 104.0 | 109.4 | 117.2 | 120.9 | 120.5 | 117.7 | 155.2 |
| 1000 | 88.2 | 101.0 | 101.3 | 99.5 | 99.6 | 100.6 | 101.9 | 105.3 | 111.0 | 116.3 | 120.7 | 119.9 | 116.5 | 154.9 |
| 1250 | 88.6 | 101.4 | 102.6 | 102.2 | 103.5 | 103.6 | 104.0 | 106.7 | 110.9 | 116.5 | 122.1 | 119.7 | 114.8 | 155.5 |
| 1600 | 98.6 | 103.5 | 102.3 | 100.6 | 101.4 | 102.5 | 103.9 | 107.3 | 111.6 | 117.4 | 121.8 | 117.8 | 113.8 | 155.2 |
| 2000 | 100.3 | 107.9 | 107.4 | 104.2 | 101.5 | 101.6 | 103.5 | 107.7 | 112.4 | 118.0 | 120.2 | 115.1 | 110.9 | 154.4 |
| 2500 | 99.3 | 107.3 | 108.6 | 108.1 | 102.4 | 104.3 | 104.7 | 108.1 | 112.3 | 119.2 | 119.1 | 114.8 | 110.3 | 154.7 |
| 3150 | 97.6 | 105.4 | 106.7 | 107.2 | 106.5 | 108.1 | 106.0 | 108.9 | 112.7 | 118.6 | 117.5 | 113.6 | 109.1 | 154.1 |
| 4000 | 96.7 | 104.1 | 105.4 | 104.3 | 106.2 | 107.5 | 107.5 | 108.8 | 111.6 | 117.3 | 116.1 | 112.0 | 107.8 | 153.1 |
| 5000 | 96.2 | 103.4 | 104.9 | 104.6 | 105.9 | 106.0 | 108.4 | 110.1 | 111.6 | 116.8 | 115.4 | 110.8 | 107.0 | 152.8 |
| 6300 | 94.6 | 102.6 | 104.3 | 103.5 | 105.3 | 106.6 | 106.3 | 110.5 | 111.4 | 115.3 | 113.7 | 109.7 | 107.1 | 152.1 |
| 8000 | 93.7 | 102.1 | 103.3 | 103.3 | 105.1 | 105.8 | 106.3 | 109.4 | 111.0 | 114.1 | 112.8 | 108.4 | 104.9 | 151.6 |
| 10000 | 91.9 | 100.7 | 102.8 | 102.4 | 104.9 | 105.8 | 105.5 | 108.8 | 109.6 | 112.8 | 110.9 | 107.9 | 103.7 | 151.1 |
| 12500 | 89.4 | 98.9 | 100.6 | 101.3 | 103.3 | 104.0 | 103.7 | 106.6 | 107.0 | 110.7 | 108.2 | 104.7 | 101.6 | 149.7 |
| 16000 | 87.0 | 96.6 | 100.0 | 100.7 | 103.1 | 103.1 | 101.6 | 105.0 | 105.6 | 109.3 | 105.8 | 102.7 | 100.1 | 149.6 |
| 20000 | 81.5 | 94.0 | 96.1 | 97.8 | 101.8 | 101.7 | 99.1 | 101.4 | 103.0 | 105.5 | 102.8 | 99.4 | 96.9 | 148.5 |
| 25000 | 80.6 | 91.2 | 93.4 | 93.7 | 98.7 | 98.9 | 96.2 | 96.5 | 99.5 | 100.7 | 98.3 | 95.4 | 94.7 | 147.1 |
| 31500 | 78.7 | 86.8 | 90.7 | 92.5 | 93.2 | 93.0 | 92.2 | 93.5 | 96.5 | 99.2 | 95.8 | 90.0 | 88.7 | 146.9 |
| 40000 | 73.7 | 81.8 | 85.7 | 87.1 | 91.0 | 91.5 | 86.8 | 88.9 | 91.2 | 94.0 | 91.5 | 85.3 | 84.9 | 146.6 |
| 50000 | 66.8 | 76.4 | 78.3 | 80.2 | 83.6 | 83.6 | 82.0 | 81.8 | 86.9 | 98.0 | 85.1 | 80.2 | 79.3 | 144.7 |
| 63000 | 61.5 | 70.7 | 72.8 | 74.1 | 74.9 | 75.5 | 76.8 | 75.7 | 82.2 | 81.8 | 79.1 | 75.2 | 74.0 | 144.0 |
| 80000 | 55.3 | 63.5 | 66.8 | 69.4 | 68.8 | 70.5 | 69.3 | 70.8 | 76.3 | 76.7 | 74.4 | 68.2 | 66.7 | 145.2 |
| GASPL | 107.1 | 115.0 | 116.0 | 115.4 | 116.5 | 116.8 | 117.0 | 119.8 | 122.9 | 128.6 | 130.8 | 129.4 | 126.4 | 166.3 |

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TEST DATE 03-16-78
LOCATION C41 ANECH CH

TAPE NO. N310
AERO. RDG. ADH180

ALPHA SB59
PAMB 29.4500

TAMB 41.00
RELHUM 31.90

MODEL TEST POINT
0300 0301

ACOUSTIC RANGE
12.2 M (40.0 FT) ARC

SIZE
21.55 SQ IN) - MODEL

FREE-JET SPEED
0. M/SEC (0. FPS)

07/19/79 17.289

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X03010

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PVL

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|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|-------|-------|------|-------|-------|-------|-------|------|------|-------|-------|------|------|------|------|------|------|------|------|------|-------|------|------|------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| FREQ | 50 | 63 | 80 | 100 | 125 | 160 | 200 | 250 | 315 | 400 | 500 | 630 | 800 | 1000 | 1250 | 1600 | 2000 | 2500 | 3150 | 4000 | 5000 | 6300 | 8000 | 10000 | 12500 | 16000 | 20000 | 25000 | 31500 | 40000 | 50000 | 63000 | 80000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 64.3 | 67.4 | 70.9 | 74.2 | 76.0 | 82.4 | 88.2 | 91.1 | 91.2 | 91.5 | 93.8 | 94.1 | 94.9 | 96.0 | 97.5 | 99.6 | 101.4 | 102.6 | 103.5 | 104.2 | 105.4 | 107.3 | 108.6 | 109.7 | 110.4 | 107.4 | 104.3 | 104.7 | 108.1 | 112.3 | 119.2 | 119.1 | 114.8 | 110.3 | 154.7 | 3150 | 97.6 | 105.4 | 106.7 | 107.2 | 108.5 | 108.1 | 106.0 | 108.9 | 112.7 | 118.6 | 117.5 | 113.6 | 109.1 | 154.1 | 4000 | 96.7 | 104.1 | 105.4 | 104.3 | 105.2 | 107.8 | 107.9 | 108.8 | 111.6 | 117.3 | 116.1 | 112.0 | 107.8 | 153.1 | 5000 | 96.2 | 103.4 | 104.9 | 104.6 | 105.9 | 106.0 | 108.4 | 110.1 | 111.6 | 116.8 | 115.4 | 110.8 | 107.0 | 152.8 | 6300 | 94.6 | 102.6 | 104.3 | 103.5 | 105.3 | 106.6 | 108.3 | 110.5 | 111.4 | 115.3 | 113.7 | 109.7 | 107.1 | 152.1 | 8000 | 93.7 | 102.1 | 103.3 | 103.3 | 105.1 | 105.8 | 108.3 | 109.4 | 111.0 | 114.1 | 112.8 | 108.4 | 104.9 | 151.6 | 10000 | 91.9 | 100.7 | 102.8 | 102.4 | 104.9 | 105.8 | 105.5 | 108.0 | 109.6 | 112.6 | 110.9 | 107.9 | 103.7 | 151.1 | 12500 | 89.4 | 98.9 | 100.6 | 101.3 | 103.6 | 104.0 | 103.7 | 106.6 | 107.0 | 110.7 | 108.2 | 104.7 | 101.6 | 149.7 | 16000 | 87.0 | 96.6 | 100.0 | 100.7 | 103.1 | 103.1 | 101.6 | 105.0 | 105.6 | 109.3 | 105.8 | 102.7 | 100.1 | 149.6 | 20000 | 81.5 | 94.0 | 96.1 | 97.8 | 101.8 | 101.7 | 99.1 | 101.4 | 103.0 | 105.5 | 102.8 | 99.4 | 96.9 | 148.5 | 25000 | 80.6 | 91.2 | 93.4 | 93.7 | 98.7 | 98.9 | 96.2 | 96.5 | 99.8 | 100.7 | 98.3 | 95.4 | 94.7 | 147.1 | 31500 | 78.7 | 86.8 | 90.7 | 92.5 | 93.2 | 93.0 | 92.2 | 93.5 | 96.5 | 99.2 | 95.8 | 90.0 | 88.7 | 146.9 | 40000 | 73.7 | 81.8 | 85.7 | 87.1 | 91.0 | 91.5 | 88.6 | 88.9 | 91.2 | 94.0 | 91.5 | 85.3 | 84.9 | 146.6 | 50000 | 66.8 | 76.4 | 78.3 | 80.2 | 83.6 | 83.6 | 82.0 | 81.8 | 86.9 | 88.0 | 85.1 | 80.2 | 78.3 | 144.7 | 63000 | 61.5 | 70.7 | 72.8 | 74.1 | 74.9 | 75.5 | 76.8 | 75.7 | 82.2 | 81.6 | 79.1 | 75.2 | 74.0 | 144.0 | 80000 | 55.3 | 63.5 | 66.8 | 69.4 | 68.6 | 70.5 | 69.3 | 70.8 | 76.3 | 76.7 | 74.4 | 68.2 | 66.7 | 145.2 | ASPL | 107.1 | 115.0 | 116.0 | 115.4 | 116.5 | 116.8 | 117.0 | 119.8 | 122.9 | 128.6 | 130.8 | 129.4 | 126.4 | 166.3 |

07/19/79 17.289

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FM0DL X03015

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|-------|------|------|-------|
| 50 | 49.6 | 71.4 | 73.8 | 73.5 | 75.8 | 77.8 | 79.0 | 81.3 | 85.3 | 93.7 | 95.6 | 95.3 | 89.4 | 170.3 |
| 63 | 51.9 | 72.0 | 75.1 | 75.1 | 76.8 | 78.8 | 80.1 | 82.1 | 86.8 | 95.3 | 97.4 | 96.1 | 89.9 | 171.6 |
| 80 | 54.9 | 73.3 | 76.1 | 76.1 | 79.6 | 80.4 | 81.4 | 84.4 | 88.6 | 96.1 | 98.7 | 96.2 | 90.2 | 172.4 |
| 100 | 60.9 | 74.2 | 77.1 | 77.9 | 79.9 | 81.4 | 82.9 | 85.9 | 90.6 | 97.3 | 99.4 | 96.8 | 90.5 | 173.3 |
| 125 | 66.6 | 81.0 | 82.4 | 81.4 | 81.9 | 83.1 | 84.1 | 87.1 | 92.1 | 96.3 | 99.1 | 96.0 | 89.2 | 173.0 |
| 160 | 66.8 | 81.2 | 83.6 | 83.9 | 85.6 | 85.9 | 86.1 | 88.4 | 91.8 | 96.3 | 100.3 | 95.6 | 87.1 | 173.6 |
| 200 | 76.6 | 83.1 | 83.6 | 82.1 | 83.4 | 84.6 | 85.9 | 88.8 | 92.6 | 97.0 | 99.8 | 93.3 | 85.6 | 173.3 |
| 250 | 78.0 | 87.2 | 87.9 | 85.5 | 83.3 | 83.5 | 85.2 | 89.0 | 92.9 | 97.3 | 97.8 | 90.3 | 82.0 | 172.6 |
| 315 | 76.5 | 86.3 | 88.8 | 89.1 | 88.9 | 85.8 | 86.2 | 89.1 | 92.6 | 98.2 | 96.3 | 89.4 | 80.6 | 172.8 |
| 400 | 74.3 | 84.0 | 86.6 | 87.9 | 89.7 | 89.5 | 87.2 | 89.7 | 92.6 | 97.2 | 94.2 | 87.6 | 78.4 | 172.3 |
| 500 | 73.0 | 82.3 | 84.9 | 84.8 | 87.1 | 88.9 | 88.8 | 89.3 | 91.2 | 95.5 | 92.4 | 85.3 | 76.1 | 171.2 |
| 630 | 72.0 | 81.2 | 84.1 | 84.7 | 86.5 | 86.8 | 89.0 | 90.2 | 90.9 | 94.7 | 91.2 | 83.4 | 74.3 | 171.0 |
| 800 | 69.9 | 80.0 | 83.2 | 83.4 | 85.7 | 87.2 | 86.7 | 90.4 | 90.3 | 92.7 | 89.0 | 81.6 | 73.3 | 170.2 |
| 1000 | 68.5 | 79.3 | 82.0 | 83.0 | 85.4 | 86.2 | 86.6 | 89.1 | 89.7 | 91.3 | 87.6 | 79.6 | 69.9 | 169.7 |
| 1250 | 66.3 | 77.5 | 81.3 | 81.9 | 85.1 | 86.2 | 85.6 | 88.4 | 88.1 | 89.7 | 85.2 | 78.3 | 67.2 | 169.2 |
| 1600 | 62.8 | 75.1 | 78.5 | 80.5 | 83.2 | 84.0 | 83.5 | 85.8 | 85.0 | 86.9 | 81.7 | 73.7 | 62.8 | 167.8 |
| 2000 | 59.4 | 72.3 | 77.6 | 79.7 | 82.8 | 83.0 | 81.2 | 83.9 | 83.2 | 85.0 | 78.3 | 70.1 | 58.3 | 167.7 |
| 2500 | 52.2 | 68.4 | 72.8 | 76.1 | 80.9 | 81.0 | 78.2 | 79.7 | 79.8 | 79.9 | 73.5 | 64.0 | 50.1 | 166.6 |
| 3150 | 48.0 | 63.1 | 68.3 | 70.4 | 76.5 | 76.9 | 73.9 | 73.2 | 74.7 | 72.6 | 65.6 | 55.0 | 39.5 | 165.2 |
| 4000 | 39.8 | 54.0 | 61.8 | 66.0 | 68.0 | 68.2 | 67.0 | 67.0 | 67.6 | 66.4 | 56.4 | 40.7 | 19.1 | 165.0 |
| 5000 | 25.0 | 41.5 | 50.5 | 55.1 | 60.8 | 61.6 | 58.6 | 56.9 | 56.0 | 53.7 | 42.9 | 22.3 | | 164.7 |
| 6300 | 0.4 | 21.9 | 31.1 | 37.4 | 43.3 | 44.0 | 41.7 | 39.0 | 39.7 | 33.5 | 18.7 | | | 162.8 |
| 10000 | | | 4.2 | 12.1 | 16.4 | 18.2 | 13.4 | 13.7 | 13.6 | 2.5 | | | | 163.3 |

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OF POOR QUALITY

| | | | | | | | | | | | | | | |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| OASPL | 94.0 | 93.7 | 95.8 | 95.9 | 97.4 | 97.8 | 97.9 | 100.3 | 102.8 | 107.6 | 108.6 | 104.7 | 97.9 | 184.3 |
| PNL | 88.4 | 89.1 | 102.0 | 102.7 | 105.2 | 105.5 | 104.8 | 107.0 | 108.5 | 112.4 | 111.2 | 105.3 | 97.3 | |
| PNLT | 89.5 | 99.7 | 102.0 | 102.7 | 106.3 | 106.8 | 104.8 | 107.0 | 109.1 | 113.0 | 112.3 | 105.3 | 98.4 | |

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-16-78 TAPE NO. N310 ALPHA SB59 TAMB 41.00
 LOCATION 041 ANECH CH AERO. RDG. ADH180 PAMB 29.4500 RELHUM 31.90

MODEL TEST POINT 0301 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 0. FREE-JET SPEED M/SEC (0. FPS)

07/19/79 17.299

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X03020
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ
50
63
80
100
125
160
200

ORIGINAL PAGE IS
OF POOR QUALITY

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 54.2 | 56.6 | 56.6 | 67.4 | 68.6 | 90.1 | 92.7 | 94.9 | 97.3 | 103.9 | 109.3 | 113.2 | 112.9 | 146.0 |
| 315 | 61.7 | 65.6 | 66.9 | 67.5 | 69.5 | 91.4 | 92.5 | 95.2 | 98.7 | 106.0 | 110.9 | 114.6 | 113.5 | 147.3 |
| 400 | 67.0 | 67.2 | 68.6 | 67.7 | 69.6 | 91.9 | 93.1 | 95.7 | 100.0 | 110.0 | 113.9 | 116.6 | 113.3 | 149.4 |
| 500 | 69.5 | 67.8 | 60.5 | 69.3 | 91.2 | 92.8 | 94.7 | 96.6 | 101.5 | 111.9 | 116.0 | 116.9 | 111.3 | 150.4 |
| 630 | 72.5 | 68.6 | 90.6 | 90.7 | 92.5 | 94.6 | 95.5 | 98.9 | 104.1 | 112.7 | 117.1 | 116.3 | 109.2 | 150.7 |
| 800 | 77.1 | 89.4 | 91.4 | 92.4 | 93.5 | 95.7 | 97.0 | 100.5 | 105.4 | 113.5 | 117.6 | 116.3 | 107.7 | 151.2 |
| 1000 | 81.7 | 93.0 | 95.0 | 93.5 | 94.9 | 97.0 | 98.6 | 101.5 | 107.8 | 114.1 | 118.0 | 114.9 | 105.3 | 151.3 |
| 1250 | 85.8 | 95.1 | 96.6 | 95.9 | 97.2 | 99.1 | 99.7 | 103.2 | 108.4 | 113.2 | 118.3 | 114.2 | 103.4 | 151.3 |
| 1600 | 96.9 | 102.5 | 101.0 | 97.5 | 97.6 | 99.7 | 101.1 | 104.0 | 109.0 | 113.6 | 119.1 | 113.5 | 102.8 | 151.9 |
| 2000 | 96.8 | 106.6 | 106.9 | 104.4 | 99.5 | 98.8 | 100.7 | 104.6 | 109.9 | 115.2 | 118.2 | 112.1 | 102.9 | 152.1 |
| 2500 | 95.5 | 105.3 | 107.3 | 107.3 | 106.9 | 103.3 | 102.4 | 105.1 | 109.8 | 116.4 | 118.4 | 110.8 | 102.6 | 152.8 |
| 3150 | 94.6 | 102.4 | 103.2 | 104.9 | 107.2 | 107.6 | 104.7 | 106.2 | 110.7 | 116.1 | 117.2 | 110.1 | 101.5 | 152.3 |
| 4000 | 94.5 | 102.1 | 103.6 | 102.3 | 102.9 | 106.0 | 106.7 | 106.6 | 109.6 | 114.8 | 115.1 | 107.0 | 99.0 | 151.0 |
| 5000 | 93.5 | 101.3 | 102.4 | 103.3 | 103.1 | 103.7 | 106.6 | 108.3 | 110.1 | 114.8 | 114.1 | 106.5 | 98.2 | 150.9 |
| 6300 | 92.6 | 100.1 | 102.1 | 101.8 | 103.3 | 105.1 | 104.6 | 108.5 | 110.2 | 113.0 | 112.2 | 104.0 | 97.4 | 150.0 |
| 8000 | 92.2 | 99.4 | 100.8 | 101.1 | 102.4 | 104.0 | 104.8 | 107.4 | 110.2 | 112.4 | 110.8 | 102.4 | 95.9 | 149.7 |
| 10000 | 91.4 | 98.5 | 100.6 | 99.9 | 102.2 | 103.9 | 103.3 | 106.3 | 108.7 | 110.9 | 108.9 | 102.1 | 95.0 | 148.9 |
| 12500 | 90.1 | 97.5 | 99.1 | 99.6 | 101.1 | 102.2 | 102.0 | 104.6 | 106.2 | 108.5 | 106.5 | 100.0 | 93.9 | 147.8 |
| 16000 | 88.3 | 96.4 | 99.3 | 98.8 | 101.4 | 101.9 | 100.6 | 102.3 | 104.9 | 107.4 | 103.8 | 98.7 | 92.9 | 147.9 |
| 20000 | 83.6 | 93.5 | 95.6 | 97.4 | 100.4 | 100.2 | 97.6 | 100.0 | 102.1 | 103.8 | 101.1 | 96.2 | 90.9 | 147.0 |
| 25000 | 81.5 | 90.5 | 92.2 | 92.2 | 97.8 | 97.7 | 95.2 | 95.0 | 99.3 | 99.0 | 96.8 | 92.4 | 88.7 | 145.9 |
| 31500 | 80.0 | 86.1 | 90.3 | 91.8 | 92.0 | 92.6 | 93.3 | 93.1 | 96.3 | 97.8 | 94.4 | 87.3 | 83.5 | 146.0 |
| 40000 | 75.3 | 80.9 | 85.3 | 86.4 | 90.1 | 90.8 | 87.9 | 87.9 | 91.5 | 91.8 | 89.4 | 82.1 | 79.2 | 145.5 |
| 50000 | 68.4 | 75.8 | 77.1 | 80.3 | 82.4 | 83.1 | 81.5 | 81.4 | 86.2 | 85.4 | 83.2 | 77.0 | 73.4 | 143.5 |
| 63000 | 62.6 | 70.5 | 71.6 | 73.7 | 74.2 | 74.4 | 73.1 | 74.1 | 81.3 | 78.7 | 77.2 | 70.5 | 67.3 | 142.4 |
| 80000 | 56.6 | 61.9 | 65.4 | 68.5 | 67.6 | 68.5 | 67.3 | 68.6 | 75.4 | 74.0 | 72.0 | 61.5 | 59.2 | 143.4 |
| GASPL | 104.6 | 112.9 | 114.0 | 113.7 | 114.4 | 115.0 | 115.0 | 117.3 | 120.8 | 125.9 | 128.4 | 125.6 | 120.3 | 163.7 |

TEST DATE 03-16-78 TAPE NO. N310 IALPHA SB59 TAMB 40.62
LOCATION C41 ANECH CH AERG. RDG. ADH179 PAMB 29.4500 RELHUM 32.90

MODEL TEST POINT 0302 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 86.09 M/SEC (289.0 FPS) FREE-JET SPEED

07/19/78 17.289

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X03020

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

10000000

12500000

16000000

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 289.00 REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-16-78 TAPE NO. N310 ALPHA 5859 TAM6 40.62
 LOCATION C41 ANECH CH AERO. R06. ADH179 PAMB 29.4500 RELHUM 32.90

MODEL TEST POINT 0302 12.2 40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 88.09 M/SEC (289.0 FPS) FREE-JET SPEED

07/19/79 17.289

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X03025

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 50 | 47.7 | 72.0 | 72.9 | 73.0 | 73.9 | 74.6 | 74.6 | 76.0 | 81.5 | 90.4 | 92.9 | 92.5 | 86.0 | 167.4 |
| 63 | 52.9 | 73.4 | 74.6 | 74.5 | 75.2 | 75.3 | 76.5 | 77.2 | 84.2 | 91.4 | 94.4 | 92.9 | 85.8 | 168.3 |
| 80 | 55.1 | 73.8 | 76.3 | 75.9 | 76.6 | 77.3 | 77.2 | 79.5 | 86.7 | 92.5 | 95.4 | 93.8 | 86.2 | 169.3 |
| 100 | 58.3 | 74.8 | 76.6 | 77.7 | 77.7 | 78.4 | 78.7 | 80.9 | 88.0 | 93.1 | 95.9 | 93.1 | 85.4 | 169.3 |
| 125 | 62.6 | 75.5 | 77.3 | 78.4 | 78.6 | 79.7 | 80.2 | 81.8 | 88.5 | 92.0 | 96.0 | 92.1 | 83.2 | 169.2 |
| 160 | 66.1 | 78.1 | 80.2 | 80.2 | 80.9 | 81.8 | 81.3 | 83.3 | 89.0 | 92.3 | 96.5 | 91.1 | 82.1 | 169.6 |
| 200 | 69.2 | 79.3 | 81.0 | 81.0 | 80.8 | 82.4 | 82.6 | 84.1 | 89.8 | 93.7 | 95.4 | 89.3 | 81.7 | 169.4 |
| 250 | 78.8 | 85.4 | 84.3 | 88.9 | 83.1 | 81.4 | 82.1 | 84.6 | 89.6 | 94.7 | 95.2 | 87.4 | 80.5 | 170.1 |
| 315 | 81.1 | 81.5 | 91.7 | 91.3 | 90.3 | 85.8 | 83.7 | 84.9 | 90.4 | 94.2 | 93.9 | 86.4 | 78.8 | 171.2 |
| 400 | 78.3 | 89.0 | 91.2 | 89.4 | 90.9 | 90.0 | 85.9 | 85.9 | 89.3 | 92.9 | 91.7 | 83.0 | 75.4 | 170.4 |
| 500 | 78.1 | 86.8 | 87.7 | 85.9 | 86.1 | 88.4 | 87.8 | 85.3 | 90.0 | 93.0 | 90.7 | 81.3 | 74.2 | 169.8 |
| 630 | 75.5 | 84.5 | 86.7 | 86.8 | 86.3 | 86.2 | 87.9 | 88.1 | 90.3 | 91.4 | 88.9 | 79.8 | 72.9 | 169.4 |
| 800 | 73.9 | 83.4 | 85.2 | 85.1 | 86.9 | 87.8 | 86.0 | 88.5 | 90.8 | 91.1 | 87.5 | 77.9 | 70.6 | 169.6 |
| 1000 | 74.4 | 83.3 | 85.9 | 85.6 | 86.4 | 87.1 | 86.9 | 88.0 | 89.2 | 89.4 | 85.3 | 77.1 | 68.7 | 169.2 |
| 1250 | 73.3 | 82.3 | 84.4 | 84.4 | 86.3 | 87.2 | 85.4 | 86.8 | 86.8 | 87.0 | 82.7 | 74.4 | 66.5 | 168.4 |
| 1600 | 71.4 | 80.6 | 83.7 | 83.8 | 84.9 | 85.3 | 83.9 | 84.8 | 85.6 | 85.9 | 79.7 | 72.4 | 63.7 | 168.2 |
| 2000 | 68.6 | 78.4 | 81.3 | 82.7 | 85.1 | 84.8 | 82.4 | 82.2 | 82.9 | 82.2 | 76.5 | 68.7 | 59.2 | 167.9 |
| 2500 | 64.5 | 75.8 | 80.2 | 80.6 | 83.5 | 82.6 | 78.9 | 79.3 | 80.8 | 77.8 | 72.4 | 64.5 | 55.1 | 168.0 |
| 3150 | 55.9 | 69.8 | 74.0 | 73.9 | 79.5 | 78.7 | 75.5 | 73.5 | 73.9 | 66.0 | 53.3 | 39.8 | 167.2 | |
| 4000 | 47.2 | 61.2 | 65.1 | 70.2 | 70.8 | 70.7 | 68.8 | 67.6 | 68.1 | 64.2 | 55.7 | 40.2 | 22.0 | 166.3 |
| 5000 | 34.7 | 48.5 | 57.0 | 59.4 | 63.8 | 64.1 | 58.6 | 57.1 | 56.9 | 50.5 | 40.1 | 21.8 | 166.2 | |
| 6300 | 11.6 | 28.6 | 39.5 | 42.5 | 46.1 | 46.8 | 43.7 | 39.7 | 40.8 | 30.5 | 17.2 | 164.6 | 163.7 | |
| 8000 | | | 9.1 | 16.6 | 19.7 | 20.0 | 19.8 | 13.2 | 15.0 | 2.5 | | | 162.7 | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

OASPL 86.9 96.5 97.6 97.7 97.9 97.6 96.4 97.3 100.8 104.2 105.4 101.3 93.7 162.4

PNL 92.5 103.1 104.9 104.9 106.5 105.2 104.4 104.9 107.3 109.2 108.3 101.7 93.7

PNLT 93.7 103.8 105.6 104.9 107.7 107.4 104.4 105.4 107.8 109.2 108.3 101.7 95.0

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

| | | | |
|-----------------------|-------------------|--------------|--------------|
| TEST DATE 03-16-78 | TAPE NO. N310 | IALPHA SB59 | TAMP 40.82 |
| LOCATION C41 ANECH CH | AERO. RDG. ADH179 | PAMB 29.4500 | RELHUM 32.90 |

| | | | | | |
|------------|-----------------|--|-------------------------------------|------|---|
| MODEL 0300 | TEST POINT 0302 | ACOUSTIC RANGE 731.5 M (2400.0 FT) SL | 9032.2 SQ CH (1400.00 SQ IN) - FULL | SIZE | FREE-JET SPEED 88.09 M/SEC (289.0 FPS) |
|------------|-----------------|--|-------------------------------------|------|---|

07/19/79 17.289

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X03030
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

QASPL

104.3

113.0

114.0

113.5

114.2

115.1

114.9

117.7

120.5

125.2

126.9

123.9

118.7

162.8

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TEST DATE 03-16-78
LOCATION C41 ANECH CH

TAPE NO. N310
AERO. RDG. ADH184

ALPHA SB59
PAMB 29.4550

TAMB 41.72
RELHUM 51.20

MODEL TEST POINT
0300 0303

ACOUSTIC RANGE
12.2 M (40.0 FT) ARC

SIZE
139.0 SQ CM (21.55 SQ IN)

FREE-JET SPEED
117.65 M/SEC (386.0 FPS)

MODEL 117.65 M/SEC (386.0 FPS)

07/19/79 17.289

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT/ ARC

IDENTIFICATION - FJ-400-FMODL X03030

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PVL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

CASPL

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MODEL/FULL SIZE SCALE FACTOR
INPUT 1.000 CALC. 1.000

FREE JET VELOCITY (FT/SEC)
FREE JET DIAMETER (IN)

REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

TEST DATE 03-16-78 TAPE NO. N310 TAMB 41.72
 LOCATION C41 ANECH CH AERO. RDG. ADH184 PAB 29.4350 RELHUM 31.20

MODEL TEST POINT 0300 ACQUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 117.65 M/SEC (386.0 FPS)

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FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X03035

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 80 | 53.7 | 73.8 | 74.3 | 73.0 | 73.7 | 73.7 | 73.8 | 74.3 | 80.4 | 89.4 | 91.5 | 91.7 | 84.6 | 166.2 |
| 83 | 52.9 | 74.2 | 75.4 | 73.1 | 75.6 | 75.1 | 75.9 | 75.9 | 82.6 | 90.3 | 93.6 | 91.6 | 83.9 | 167.2 |
| 86 | 53.6 | 75.2 | 76.5 | 75.1 | 80.0 | 76.5 | 76.3 | 78.2 | 85.1 | 91.2 | 94.2 | 91.9 | 84.1 | 167.9 |
| 100 | 59.0 | 76.5 | 77.3 | 76.5 | 77.1 | 77.6 | 77.8 | 79.7 | 87.2 | 92.5 | 94.5 | 91.0 | 84.4 | 168.2 |
| 125 | 63.7 | 77.2 | 78.5 | 77.8 | 78.8 | 78.7 | 78.9 | 81.3 | 87.5 | 91.5 | 94.7 | 89.5 | 83.6 | 168.0 |
| 160 | 66.9 | 78.9 | 80.3 | 79.0 | 80.6 | 80.6 | 80.0 | 82.6 | 88.6 | 92.3 | 94.3 | 88.0 | 82.9 | 168.1 |
| 200 | 73.5 | 85.9 | 83.0 | 80.8 | 81.9 | 81.3 | 81.2 | 83.7 | 89.4 | 93.6 | 93.5 | 87.4 | 83.7 | 168.7 |
| 250 | 84.7 | 93.1 | 90.0 | 84.6 | 85.4 | 81.7 | 81.1 | 83.9 | 89.6 | 93.8 | 93.4 | 87.7 | 82.5 | 170.3 |
| 315 | 83.4 | 93.4 | 94.4 | 90.8 | 92.0 | 87.2 | 83.8 | 84.6 | 81.1 | 94.1 | 93.4 | 88.3 | 82.6 | 172.1 |
| 400 | 79.0 | 89.2 | 91.6 | 91.9 | 91.1 | 91.6 | 87.3 | 87.0 | 90.5 | 93.4 | 91.9 | 86.5 | 80.3 | 171.4 |
| 500 | 80.3 | 89.2 | 89.5 | 89.6 | 87.2 | 89.2 | 88.9 | 87.6 | 90.2 | 92.9 | 89.3 | 82.4 | 76.7 | 170.4 |
| 630 | 78.9 | 87.7 | 89.6 | 87.0 | 87.5 | 87.6 | 87.8 | 89.6 | 90.7 | 90.9 | 86.9 | 80.0 | 75.2 | 169.9 |
| 800 | 75.4 | 84.3 | 86.7 | 87.2 | 87.9 | 88.4 | 87.4 | 88.9 | 90.5 | 89.3 | 85.5 | 77.9 | 72.3 | 169.4 |
| 1000 | 76.4 | 85.2 | 87.2 | 86.9 | 86.9 | 87.5 | 86.5 | 88.1 | 88.7 | 88.6 | 83.6 | 76.1 | 70.4 | 169.2 |
| 1250 | 75.7 | 85.1 | 86.2 | 86.1 | 86.9 | 87.2 | 85.3 | 86.6 | 86.6 | 86.8 | 81.6 | 76.2 | 70.4 | 168.9 |
| 1600 | 73.4 | 82.8 | 85.3 | 84.6 | 85.2 | 85.0 | 84.4 | 84.5 | 85.7 | 85.6 | 79.6 | 74.0 | 68.4 | 168.8 |
| 2000 | 70.1 | 80.5 | 82.7 | 82.5 | 84.8 | 84.8 | 82.7 | 83.2 | 83.7 | 82.5 | 77.3 | 70.9 | 64.6 | 168.7 |
| 2500 | 66.7 | 78.0 | 81.0 | 81.3 | 83.7 | 82.6 | 78.8 | 79.7 | 80.9 | 77.1 | 71.1 | 64.1 | 57.0 | 168.4 |
| 3150 | 59.1 | 72.5 | 75.7 | 77.3 | 79.8 | 79.2 | 75.1 | 73.9 | 76.3 | 73.4 | 67.0 | 56.0 | 45.8 | 168.2 |
| 4000 | 49.7 | 63.2 | 67.9 | 68.8 | 71.6 | 71.0 | 68.8 | 67.7 | 68.8 | 65.0 | 56.8 | 43.3 | 27.9 | 167.1 |
| 5000 | 36.9 | 50.6 | 58.1 | 61.1 | 64.6 | 64.1 | 58.8 | 57.7 | 58.2 | 50.4 | 40.8 | 24.3 | 0.4 | 167.2 |
| 6300 | 14.0 | 30.6 | 41.2 | 44.5 | 46.3 | 46.6 | 44.2 | 40.4 | 42.3 | 30.0 | 17.0 | 165.7 | 164.1 | |
| 8000 | | | 10.8 | 18.5 | 20.0 | 20.5 | 20.4 | 14.5 | 15.1 | 0.1 | | | 152.8 | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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OASPL 89.8 99.3 99.8 98.4 99.7 98.3 98.7 97.6 100.8 103.7 104.0 99.9 93.6 182.4
 PWL 95.1 105.5 106.8 105.8 107.0 106.4 104.5 105.2 107.4 108.9 107.3 101.8 95.8
 PNLT 96.2 105.5 107.5 106.3 108.3 107.6 105.0 105.2 108.0 109.5 107.3 101.8 96.8

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-16-78 TAPE NO. N310 ALPHA SB59 TAMB 41.72
 LOCATION C41 ANECH CH AERO. RDG. ADH184 PAMB 29.4550 RELHUM 31.20

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
 030G 0303 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.65 M/SEC (386.0 FPS)

07/19/78 17.289

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODEL X03040
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PML

FREQ

50

63

80

100

125

160

200

250 66.3 92.6 92.6 93.1 93.5 95.3 95.3 96.0 100.1 102.6 109.6 114.5 116.0 117.4 151.0
315 69.1 90.9 91.9 93.2 95.1 97.2 97.8 97.8 100.2 105.2 112.0 116.4 119.3 119.0 152.4
400 72.9 92.7 93.5 95.1 96.7 98.1 98.1 100.7 106.0 116.0 119.2 120.6 117.5 154.2
500 75.5 93.5 95.5 95.1 96.2 98.3 98.3 99.4 102.1 107.5 117.6 121.0 118.1 155.5
630 78.3 94.9 96.6 96.2 98.3 99.6 101.3 104.2 109.6 116.7 122.3 121.3 118.7 156.3
800 84.9 95.7 97.7 98.5 98.8 100.9 102.3 106.0 111.2 119.5 122.9 121.6 118.2 156.9
1000 94.0 105.5 105.8 105.4 103.4 103.0 103.6 106.8 112.5 119.3 123.7 121.1 117.3 157.3
1250 96.3 106.6 105.9 105.4 105.0 104.9 105.5 108.4 113.1 119.2 124.8 120.3 115.7 157.7
1600 103.7 109.5 109.0 106.8 104.1 104.6 105.6 108.6 113.5 119.8 124.1 118.5 113.8 157.3
2000 101.6 109.9 111.4 110.7 108.5 105.4 106.0 109.4 113.9 120.7 122.4 116.1 111.6 156.9
2500 99.3 108.6 109.6 110.1 111.2 109.8 107.7 110.1 114.1 121.5 120.6 115.8 110.6 156.7
3150 100.1 108.2 107.9 108.4 109.6 111.6 110.8 111.2 114.4 120.8 119.0 114.4 108.6 156.1
4000 99.5 106.4 107.9 108.1 108.2 109.0 110.9 111.6 113.9 119.5 117.7 112.8 108.0 155.1
5000 98.5 105.6 107.1 107.1 108.2 109.0 109.9 113.1 113.9 119.1 117.2 111.5 106.3 155.0
6300 97.1 105.1 106.8 106.8 107.3 109.6 109.8 112.8 113.7 118.0 115.7 110.5 106.1 154.5
8000 96.6 104.6 106.5 106.5 107.8 108.5 109.0 111.7 113.4 116.4 114.3 108.9 104.4 153.8
10000 94.5 103.2 105.3 105.3 107.2 108.6 108.2 111.0 112.3 115.5 112.3 107.8 103.4 153.4
12500 91.8 100.6 103.0 104.3 106.3 107.4 106.6 109.0 109.6 112.9 110.2 104.9 101.8 152.1
16000 90.7 99.1 102.4 103.1 105.5 106.8 104.7 107.4 107.7 111.0 107.7 103.4 99.8 151.8
20000 85.0 95.7 98.2 100.8 104.2 105.1 101.7 104.1 104.9 106.9 104.2 100.3 97.6 150.7
25000 83.5 93.3 95.8 96.6 101.4 101.3 99.1 98.6 102.2 103.1 99.9 95.8 94.6 149.4
31500 81.4 89.9 93.1 94.9 95.4 96.7 94.9 95.9 98.4 100.8 96.7 91.1 88.4 148.8
40000 76.9 84.0 88.1 89.7 92.9 94.1 89.7 90.8 93.6 95.9 92.2 85.7 84.3 148.5
50000 69.7 79.1 80.7 83.6 85.2 86.5 84.7 84.4 89.3 90.2 86.5 80.9 79.0 147.0
63000 64.2 73.9 75.2 77.2 77.3 78.2 79.5 78.6 85.1 84.5 80.5 75.1 73.7 146.5
80000 58.7 66.7 70.2 72.8 71.5 73.4 72.4 73.7 79.7 78.3 76.1 67.6 67.1 147.8

GASOL 109.8 117.8 118.6 118.7 119.2 119.8 119.7 122.1 124.9 131.1 133.1 130.7 127.4 168.5

TEST DATE 03-16-78

LOCATION C41 ANECH CH

TAPE NO. N310

AERO. RDG. ADH181

ALPHA SE59

PAMB 29.4550

TAMB 41.18

RELHUM 30.60

MODEL TEST POINT

0300 0304

ACOUSTIC RANGE

12.2 M (40.0 FT)

ARC

139.0 SQ CM (21.55 SQ IN)

SIZE

0. M/SEC (0. FPS)

FREE-JET SPEED

0. M/SEC (0. FPS)

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FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X03040

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 45. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 66.3 | 92.6 | 92.6 | 93.1 | 93.5 | 95.3 | 96.0 | 100.1 | 102.6 | 109.6 | 114.5 | 118.0 | 117.4 | 151.0 |
| 315 | 69.1 | 90.9 | 91.9 | 93.2 | 95.1 | 97.2 | 97.8 | 100.2 | 105.2 | 112.0 | 116.4 | 119.3 | 118.0 | 152.4 |
| 400 | 72.9 | 92.7 | 93.5 | 95.1 | 96.7 | 98.1 | 98.7 | 100.7 | 106.0 | 112.0 | 116.2 | 120.6 | 117.5 | 154.2 |
| 500 | 75.5 | 93.5 | 95.5 | 95.1 | 96.2 | 98.3 | 99.4 | 102.1 | 107.5 | 117.6 | 121.0 | 121.4 | 118.1 | 155.5 |
| 630 | 78.3 | 94.9 | 96.6 | 96.2 | 98.3 | 99.6 | 101.3 | 104.2 | 109.6 | 118.7 | 122.3 | 121.3 | 118.7 | 156.3 |
| 800 | 84.3 | 95.7 | 97.7 | 98.5 | 98.8 | 100.9 | 102.3 | 106.0 | 111.2 | 119.5 | 122.9 | 121.8 | 118.2 | 156.9 |
| 1000 | 94.0 | 105.5 | 105.5 | 103.4 | 103.4 | 103.6 | 106.8 | 112.5 | 119.3 | 123.7 | 121.1 | 117.3 | 116.3 | |
| 1250 | 96.3 | 106.6 | 105.9 | 105.4 | 105.0 | 104.9 | 105.5 | 108.4 | 113.1 | 119.2 | 124.8 | 120.3 | 115.7 | 157.7 |
| 1600 | 103.7 | 109.5 | 109.0 | 106.8 | 104.1 | 104.5 | 105.6 | 108.8 | 113.5 | 119.9 | 124.1 | 118.5 | 113.8 | 157.3 |
| 2000 | 101.6 | 109.9 | 111.4 | 110.7 | 108.5 | 105.4 | 106.0 | 109.4 | 113.9 | 120.7 | 122.4 | 116.1 | 111.6 | 156.9 |
| 2500 | 99.3 | 108.6 | 109.6 | 110.1 | 111.2 | 109.8 | 107.7 | 110.1 | 114.1 | 121.5 | 120.6 | 115.8 | 110.6 | 156.7 |
| 3150 | 100.1 | 108.2 | 107.9 | 108.4 | 109.8 | 111.6 | 110.8 | 111.2 | 114.4 | 120.8 | 119.0 | 114.4 | 108.6 | 156.1 |
| 4000 | 98.5 | 105.4 | 107.9 | 108.1 | 108.2 | 108.0 | 110.9 | 111.6 | 113.9 | 119.5 | 117.7 | 112.8 | 108.0 | 155.1 |
| 5000 | 98.5 | 105.6 | 107.1 | 107.1 | 108.2 | 109.0 | 109.9 | 113.1 | 113.9 | 119.1 | 117.2 | 111.5 | 106.3 | 155.0 |
| 6300 | 97.1 | 105.1 | 106.8 | 106.8 | 107.3 | 109.6 | 109.6 | 112.8 | 113.7 | 118.0 | 115.7 | 110.5 | 106.1 | 154.5 |
| 8000 | 96.6 | 104.6 | 106.5 | 106.6 | 107.8 | 108.5 | 109.0 | 111.7 | 113.4 | 116.4 | 114.3 | 108.9 | 104.4 | 153.8 |
| 10000 | 94.6 | 103.2 | 105.3 | 105.3 | 107.2 | 108.6 | 108.2 | 111.0 | 112.3 | 115.5 | 112.3 | 107.8 | 103.4 | 153.4 |
| 12500 | 91.8 | 100.6 | 103.0 | 104.3 | 106.3 | 107.4 | 106.6 | 109.0 | 109.6 | 112.9 | 110.2 | 104.9 | 101.8 | 152.1 |
| 16000 | 90.7 | 99.1 | 102.4 | 103.1 | 105.5 | 106.9 | 104.7 | 107.4 | 107.7 | 111.0 | 107.7 | 103.4 | 99.8 | 151.8 |
| 20000 | 85.0 | 96.7 | 98.2 | 100.8 | 104.2 | 105.1 | 101.7 | 104.1 | 104.9 | 106.9 | 104.2 | 100.3 | 97.6 | 150.7 |
| 25000 | 83.5 | 93.3 | 95.8 | 96.6 | 101.4 | 101.3 | 99.1 | 98.6 | 102.2 | 103.1 | 99.9 | 95.8 | 94.6 | 149.4 |
| 31500 | 81.4 | 88.9 | 93.1 | 94.9 | 95.4 | 95.7 | 94.9 | 95.9 | 98.4 | 100.8 | 96.7 | 91.1 | 88.4 | 148.8 |
| 40000 | 76.9 | 84.0 | 88.1 | 89.7 | 92.9 | 94.1 | 89.7 | 90.8 | 93.6 | 95.9 | 92.2 | 85.7 | 84.3 | 148.6 |
| 50000 | 69.7 | 79.1 | 80.7 | 83.6 | 85.2 | 86.5 | 84.7 | 84.4 | 89.3 | 90.2 | 86.5 | 80.9 | 79.0 | 147.0 |
| 63000 | 64.2 | 73.9 | 75.2 | 77.2 | 77.3 | 78.2 | 79.5 | 78.6 | 85.1 | 84.5 | 80.5 | 75.1 | 73.7 | 146.5 |
| 80000 | 58.7 | 66.7 | 70.2 | 72.8 | 71.6 | 73.4 | 72.4 | 73.7 | 79.7 | 78.3 | 76.1 | 67.6 | 67.1 | 147.8 |
| GASPL | 109.8 | 117.8 | 118.8 | 118.7 | 119.2 | 119.8 | 119.7 | 122.1 | 124.9 | 131.1 | 133.1 | 130.7 | 127.4 | 168.5 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | REFRACTION CORRECTION - YES |
|------------------------------|------------------------------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) 46.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 03-16-78 | TAPE NO. | N310 | ALPHA | 3559 | TAMB | 41.18 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH181 | PAMB | 29.4550 | RELHUM | 30.60 |

| MODEL | TEST POINT | ACQUSTIC RANGE | 12.2 M (40.0 FT) ARC | 139.0 SQ CM (21.55 SQ IN) - MODEL | 0. M/SEC (0. FPS) | FREE-JET SPEED |
|-------|------------|----------------|-----------------------|------------------------------------|--------------------|----------------|
| U300 | 0304 | | | | | |

07/19/79 17.289

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FM6DL X03045

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PUL |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|------|------|-------|
| 50 | 51.6 | 72.9 | 75.0 | 75.5 | 77.5 | 79.3 | 80.5 | 82.6 | 87.3 | 95.2 | 97.8 | 97.1 | 90.7 | 172.3 |
| 63 | 54.1 | 73.7 | 76.8 | 77.1 | 78.6 | 80.8 | 81.8 | 84.1 | 88.8 | 97.8 | 99.6 | 97.9 | 91.2 | 173.6 |
| 80 | 56.9 | 75.0 | 77.9 | 78.1 | 80.6 | 82.1 | 83.8 | 86.1 | 90.9 | 98.9 | 100.9 | 97.7 | 91.7 | 174.5 |
| 100 | 63.4 | 75.7 | 78.9 | 80.4 | 81.1 | 83.4 | 84.8 | 87.9 | 92.4 | 99.6 | 101.4 | 98.1 | 91.0 | 175.0 |
| 125 | 72.4 | 85.5 | 86.9 | 87.4 | 85.6 | 85.4 | 85.9 | 88.6 | 93.6 | 99.3 | 102.1 | 97.3 | 89.9 | 175.4 |
| 160 | 74.5 | 86.4 | 86.8 | 87.1 | 87.1 | 87.1 | 87.6 | 90.1 | 94.1 | 99.0 | 103.0 | 98.1 | 87.9 | 175.8 |
| 200 | 81.6 | 89.1 | 89.8 | 88.3 | 86.1 | 86.6 | 87.6 | 90.3 | 94.3 | 99.5 | 102.1 | 94.1 | 85.6 | 175.4 |
| 250 | 79.5 | 89.2 | 91.9 | 92.0 | 90.3 | 87.3 | 87.8 | 90.7 | 94.4 | 100.1 | 100.1 | 91.3 | 82.8 | 175.0 |
| 315 | 76.5 | 87.6 | 89.8 | 91.1 | 92.7 | 91.4 | 89.2 | 91.1 | 94.3 | 100.5 | 97.9 | 90.4 | 80.9 | 174.8 |
| 400 | 76.8 | 86.8 | 87.8 | 89.2 | 91.0 | 93.0 | 92.0 | 91.9 | 94.3 | 99.4 | 95.7 | 88.3 | 78.0 | 174.2 |
| 500 | 75.8 | 84.6 | 87.4 | 88.5 | 89.1 | 90.1 | 91.8 | 92.0 | 93.4 | 97.8 | 93.9 | 86.1 | 75.4 | 173.3 |
| 630 | 74.2 | 83.4 | 86.4 | 87.2 | 88.8 | 89.8 | 90.5 | 93.2 | 93.1 | 96.9 | 92.9 | 84.1 | 73.5 | 173.1 |
| 800 | 72.4 | 82.5 | 85.7 | 86.6 | 87.7 | 90.2 | 90.2 | 92.6 | 92.6 | 95.5 | 91.0 | 82.4 | 72.3 | 172.6 |
| 1000 | 71.5 | 81.8 | 85.2 | 86.3 | 88.1 | 88.9 | 89.3 | 91.4 | 92.1 | 93.5 | 89.1 | 80.1 | 69.4 | 171.9 |
| 1250 | 69.0 | 80.0 | 83.8 | 84.9 | 87.3 | 88.1 | 88.3 | 90.6 | 90.8 | 92.4 | 86.7 | 78.2 | 67.0 | 171.5 |
| 1600 | 65.3 | 76.8 | 81.0 | 83.5 | 86.1 | 87.5 | 86.5 | 88.2 | 87.7 | 89.1 | 83.6 | 73.9 | 63.0 | 170.2 |
| 2000 | 63.1 | 74.7 | 80.1 | 82.1 | 85.2 | 85.7 | 84.4 | 86.4 | 85.4 | 86.6 | 80.2 | 70.8 | 58.0 | 169.9 |
| 2500 | 55.6 | 71.1 | 75.0 | 79.0 | 83.4 | 84.5 | 80.9 | 82.4 | 81.7 | 81.3 | 74.9 | 65.0 | 50.8 | 168.8 |
| 3150 | 50.9 | 65.3 | 70.7 | 73.3 | 79.2 | 79.4 | 76.9 | 75.4 | 77.1 | 75.0 | 65.4 | 55.4 | 39.5 | 167.6 |
| 4000 | 42.5 | 56.2 | 64.2 | 68.4 | 70.2 | 70.9 | 69.6 | 69.4 | 69.5 | 68.1 | 57.8 | 41.8 | 18.8 | 167.0 |
| 5000 | 28.2 | 43.6 | 52.9 | 57.8 | 62.7 | 64.5 | 59.5 | 58.8 | 58.4 | 55.6 | 43.5 | 22.7 | | 166.7 |
| 6300 | 3.3 | 24.5 | 33.5 | 40.8 | 44.9 | 46.9 | 44.4 | 41.7 | 42.1 | 35.6 | 20.1 | | | 165.1 |
| 8000 | | | 6.6 | 15.2 | 18.9 | 20.9 | 21.0 | 16.6 | 16.5 | 5.1 | | | | 164.7 |
| 10000 | | | | | | | | | | | | | | 165.9 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| CASPL | 86.9 | 96.7 | 98.7 | 99.4 | 100.1 | 100.7 | 100.6 | 102.5 | 104.6 | 110.1 | 110.8 | 106.0 | 99.8 | 186.4 |
| PNL | 91.3 | 101.6 | 104.6 | 105.6 | 107.7 | 108.7 | 107.6 | 108.3 | 110.6 | 114.7 | 113.3 | 106.1 | 97.7 | |
| PNLT | 92.4 | 102.3 | 105.3 | 106.2 | 108.6 | 109.9 | 107.6 | 109.3 | 111.1 | 115.3 | 114.3 | 108.1 | 98.6 | |

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-16-78 TAPE NO. N310 IALPHA SB59 TAMB 41.18
 LOCATION C41 ANECH CH AERO. RDG. ADH181 PAMB 29.4550 RELHUM 30.80

MODEL TEST POINT 0304 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 0. FREE-JET SPEED M/SEC (O. FPS)

07/19/79 17.289

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X03050
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ
50
63
80
100
125
160
200

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 63.3 | 66.6 | 69.1 | 70.1 | 70.2 | 72.6 | 75.2 | 77.4 | 79.3 | 106.9 | 112.0 | 116.0 | 115.1 | 148.9 |
| 315 | 66.4 | 68.4 | 69.7 | 72.1 | 73.4 | 74.6 | 77.2 | 79.2 | 101.4 | 109.2 | 114.4 | 117.6 | 116.2 | 150.4 |
| 400 | 70.4 | 69.7 | 91.2 | 90.0 | 92.1 | 94.0 | 95.1 | 97.7 | 102.7 | 112.8 | 117.4 | 119.1 | 115.5 | 152.2 |
| 500 | 72.2 | 90.0 | 93.0 | 91.6 | 93.4 | 95.0 | 96.4 | 99.1 | 104.5 | 115.4 | 119.5 | 119.9 | 114.3 | 153.6 |
| 630 | 74.6 | 90.9 | 93.1 | 92.7 | 95.3 | 96.6 | 98.0 | 101.4 | 106.4 | 116.0 | 120.5 | 118.3 | 112.2 | 154.0 |
| 800 | 80.6 | 92.9 | 94.9 | 94.7 | 95.8 | 97.7 | 99.0 | 103.2 | 108.9 | 116.7 | 121.6 | 119.0 | 110.5 | 154.6 |
| 1000 | 87.0 | 98.7 | 99.8 | 97.3 | 99.1 | 99.5 | 100.9 | 104.3 | 110.8 | 117.1 | 122.0 | 117.9 | 108.3 | 154.8 |
| 1250 | 95.3 | 105.6 | 102.6 | 100.7 | 100.0 | 101.1 | 102.0 | 105.9 | 110.9 | 117.0 | 123.3 | 117.7 | 107.2 | 155.6 |
| 1600 | 99.9 | 109.0 | 109.3 | 107.6 | 103.4 | 102.0 | 103.1 | 106.3 | 111.5 | 117.6 | 123.5 | 117.0 | 106.8 | 156.3 |
| 2000 | 97.6 | 107.1 | 109.9 | 110.7 | 109.5 | 106.1 | 103.5 | 107.2 | 112.4 | 119.0 | 122.7 | 116.1 | 106.1 | 156.1 |
| 2500 | 96.0 | 104.6 | 106.3 | 107.1 | 106.2 | 110.0 | 106.9 | 108.1 | 112.1 | 119.2 | 120.5 | 113.5 | 104.3 | 155.3 |
| 3150 | 96.6 | 104.9 | 105.4 | 104.9 | 106.0 | 109.4 | 109.8 | 109.4 | 113.4 | 116.6 | 119.0 | 112.1 | 103.4 | 154.5 |
| 4000 | 95.8 | 102.6 | 104.9 | 105.1 | 104.7 | 105.5 | 108.4 | 110.6 | 113.4 | 117.5 | 117.9 | 109.3 | 101.5 | 153.6 |
| 5000 | 95.7 | 102.6 | 104.4 | 104.3 | 105.6 | 105.8 | 107.4 | 111.3 | 113.1 | 117.3 | 116.7 | 108.0 | 100.3 | 153.3 |
| 6300 | 94.4 | 102.3 | 104.1 | 104.0 | 105.0 | 106.9 | 107.1 | 110.5 | 113.4 | 115.8 | 114.7 | 106.5 | 99.4 | 152.6 |
| 8000 | 94.7 | 102.4 | 103.5 | 103.8 | 104.9 | 105.5 | 106.5 | 109.4 | 113.0 | 114.4 | 113.8 | 105.2 | 97.9 | 152.1 |
| 10000 | 93.4 | 100.9 | 103.1 | 103.4 | 104.9 | 105.6 | 105.5 | 106.8 | 111.4 | 113.3 | 111.4 | 104.1 | 96.9 | 151.4 |
| 12500 | 90.8 | 98.9 | 101.0 | 102.3 | 103.8 | 104.2 | 104.4 | 107.1 | 108.9 | 111.2 | 109.0 | 101.7 | 95.1 | 150.3 |
| 16000 | 89.2 | 97.6 | 100.2 | 101.2 | 103.8 | 104.6 | 102.8 | 105.4 | 107.5 | 109.6 | 107.0 | 100.2 | 93.9 | 150.3 |
| 20000 | 84.0 | 94.7 | 97.0 | 98.6 | 102.3 | 102.4 | 100.3 | 102.4 | 105.2 | 106.0 | 103.5 | 97.4 | 91.9 | 149.3 |
| 25000 | 82.6 | 92.1 | 93.9 | 94.9 | 99.5 | 99.6 | 97.2 | 97.7 | 102.0 | 100.9 | 100.3 | 93.1 | 90.4 | 148.1 |
| 31500 | 81.2 | 87.5 | 91.2 | 93.5 | 94.0 | 94.0 | 93.9 | 95.0 | 99.0 | 99.2 | 96.6 | 88.4 | 84.7 | 147.9 |
| 40000 | 76.5 | 82.3 | 86.2 | 87.8 | 92.0 | 92.4 | 88.3 | 90.3 | 93.7 | 93.7 | 91.0 | 83.0 | 79.9 | 147.3 |
| 50000 | 69.6 | 77.2 | 79.3 | 81.4 | 83.8 | 84.8 | 83.5 | 83.5 | 89.1 | 88.0 | 85.1 | 77.7 | 73.8 | 145.6 |
| 63000 | 63.5 | 71.9 | 72.6 | 74.8 | 75.9 | 76.8 | 77.8 | 77.2 | 84.7 | 82.3 | 79.1 | 72.7 | 68.5 | 145.1 |
| 80000 | 57.3 | 64.3 | 67.0 | 70.7 | 69.3 | 70.7 | 70.5 | 71.8 | 78.5 | 76.2 | 74.4 | 63.5 | 59.6 | 145.9 |
| GASPL | 106.6 | 115.4 | 116.6 | 117.0 | 117.5 | 117.5 | 120.1 | 123.6 | 128.9 | 132.1 | 128.5 | 123.1 | 166.8 | |

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TEST DATE 03-16-78 TAPE NO. N310 ALPHA SB59 TAMB 41.15
LOCATION C41 ANECH CH AERG. RDG. ADH182 PAMB 29.4550 RELHUM 31.30

MODEL TEST POINT 0300 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 68.09 M/SEC (289.0 FPS) FREE-JET SPEED

07/19/79 17.289

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X03050

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

15000

20000

25000

31500

40000

50000

63000

80000

100000

125000

150000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1500000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

10000000

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 289.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-16-78 TAP NO. N310 TAP 3859 TAP 41.18
LOCATION C41 ANECH CH AERG. RDG. ADH162 PAMB 29.4550 RELHUM 31.30

MODEL TEST POINT 0305 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 86.09 M/SEC (289.0 FPS)
FREE-JET SPEED

263

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 98 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X03055

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|-------|
| 50 | 52.4 | 74.5 | 74.4 | 75.2 | 76.2 | 76.6 | 76.8 | 78.2 | 84.6 | 94.0 | 96.5 | 95.7 | 89.3 | 170.7 |
| 63 | 56.4 | 76.0 | 77.2 | 76.7 | 77.5 | 77.7 | 78.2 | 79.8 | 86.4 | 94.6 | 97.9 | 95.8 | 89.7 | 171.4 |
| 80 | 57.7 | 76.0 | 78.8 | 77.9 | 79.4 | 79.3 | 79.7 | 81.9 | 89.0 | 95.5 | 99.2 | 96.4 | 88.9 | 172.5 |
| 100 | 60.4 | 77.1 | 79.1 | 79.8 | 79.9 | 80.4 | 80.7 | 83.6 | 90.9 | 96.0 | 99.8 | 95.9 | 88.3 | 172.8 |
| 125 | 66.0 | 78.8 | 80.6 | 81.7 | 82.8 | 82.2 | 82.5 | 84.5 | 90.9 | 95.7 | 100.9 | 95.5 | 86.8 | 173.3 |
| 160 | 71.2 | 83.5 | 84.5 | 85.3 | 83.7 | 83.8 | 83.5 | 86.0 | 91.5 | 96.2 | 101.2 | 94.5 | 86.0 | 173.7 |
| 200 | 80.3 | 91.0 | 87.8 | 92.1 | 87.0 | 84.7 | 84.6 | 86.3 | 92.2 | 97.4 | 99.8 | 92.2 | 84.7 | 173.6 |
| 250 | 84.5 | 94.2 | 94.3 | 94.7 | 93.0 | 87.7 | 84.8 | 87.1 | 91.8 | 97.4 | 97.7 | 90.1 | 82.0 | 173.9 |
| 315 | 80.2 | 90.7 | 93.8 | 91.8 | 92.9 | 92.5 | 88.2 | 87.9 | 93.1 | 96.7 | 95.6 | 88.3 | 80.3 | 173.2 |
| 400 | 80.0 | 89.4 | 91.2 | 89.4 | 89.6 | 91.8 | 90.9 | 89.1 | 93.1 | 95.7 | 94.4 | 85.2 | 77.9 | 172.5 |
| 500 | 79.9 | 89.3 | 89.9 | 88.7 | 87.8 | 88.0 | 89.6 | 90.3 | 93.0 | 95.5 | 93.2 | 83.8 | 76.2 | 172.2 |
| 630 | 76.8 | 85.1 | 88.0 | 87.8 | 88.8 | 88.2 | 88.7 | 91.1 | 93.5 | 94.2 | 91.4 | 82.3 | 75.0 | 171.8 |
| 800 | 76.2 | 84.7 | 87.2 | 88.3 | 88.7 | 89.6 | 88.5 | 90.5 | 93.5 | 93.0 | 90.5 | 80.6 | 72.6 | 171.8 |
| 1000 | 76.1 | 85.6 | 87.9 | 87.5 | 88.4 | 88.6 | 88.6 | 89.9 | 91.9 | 91.9 | 87.8 | 79.1 | 70.6 | 171.4 |
| 1250 | 73.8 | 83.7 | 86.0 | 87.8 | 88.9 | 88.9 | 87.6 | 89.3 | 89.5 | 89.7 | 85.2 | 76.1 | 67.7 | 170.8 |
| 1600 | 73.4 | 83.0 | 86.2 | 86.5 | 87.6 | 87.3 | 86.3 | 87.2 | 88.3 | 88.1 | 83.9 | 73.9 | 64.6 | 170.7 |
| 2000 | 69.3 | 79.9 | 83.2 | 85.1 | 87.5 | 87.5 | 84.6 | 85.4 | 86.1 | 84.4 | 78.9 | 69.9 | 60.1 | 170.3 |
| 2500 | 65.5 | 76.9 | 81.1 | 81.8 | 85.4 | 84.8 | 81.5 | 81.8 | 83.0 | 79.1 | 75.1 | 64.3 | 55.8 | 169.8 |
| 3150 | 56.3 | 71.0 | 75.4 | 76.6 | 81.2 | 80.7 | 77.2 | 76.8 | 78.4 | 75.3 | 68.2 | 54.5 | 41.0 | 169.1 |
| 4000 | 47.9 | 62.9 | 67.7 | 71.9 | 72.7 | 72.2 | 70.8 | 69.5 | 70.3 | 66.1 | 57.4 | 41.1 | 22.6 | 168.1 |
| 5000 | 35.8 | 49.9 | 57.9 | 60.8 | 65.7 | 65.8 | 60.2 | 59.3 | 59.8 | 53.1 | 42.0 | 22.5 | | 168.1 |
| 6300 | 12.9 | 30.3 | 40.4 | 43.6 | 47.5 | 48.2 | 45.3 | 41.9 | 44.2 | 34.1 | 19.1 | | | 166.6 |
| 8000 | | | 11.3 | 17.8 | 21.4 | 22.5 | 21.5 | 16.3 | 18.2 | 4.6 | | | | 165.0 |

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|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| CASPL | 89.6 | 99.4 | 100.6 | 100.8 | 100.5 | 100.0 | 98.9 | 100.0 | 103.6 | 107.2 | 109.1 | 104.2 | 96.7 | 185.2 |
| PNL | 95.0 | 105.4 | 107.1 | 107.5 | 108.9 | 108.6 | 106.7 | 107.6 | 110.1 | 111.8 | 111.6 | 104.4 | 95.4 | |
| PNLT | 96.2 | 105.9 | 107.6 | 107.5 | 110.2 | 109.9 | 106.7 | 107.6 | 110.6 | 112.4 | 111.6 | 104.4 | 97.6 | |

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

| | | | | | | | |
|-----------|--------------|------------|--------|---------|---------|--------|-------|
| TEST DATE | 03-16-78 | TAPE NO. | N310 | I ALPHA | SB59 | TAMB | 41.18 |
| LOCATION | C41 ANECH CH | AERG. RDG. | ADH182 | PAMB | 29.4550 | RELHUM | 31.30 |

| | | | | | | | | | |
|-------|------|------------|------|----------------|-------------------------|------|-------------------------------------|----------------|--------------------------|
| MODEL | 0300 | TEST POINT | 0305 | ACOUSTIC RANGE | 731.5 M (2400.0 FT) SL | SIZE | 9032.2 SQ CM (1400.00 SQ IN) - FULL | FREE-JET SPEED | 88.09 M/SEC (289.0 FPS) |
|-------|------|------------|------|----------------|-------------------------|------|-------------------------------------|----------------|--------------------------|

07/19/79 17.289

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 88 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X03060
BACKGROUND FJB-400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PHL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

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QASPL 106.6 115.5 116.8 116.2 116.7 117.3 117.3 119.8 122.9 128.3 130.6 126.6 121.4 165.8

TEST DATE 03-16-78 TAPE NO. N310 ALPHA 3859 TAMB 41.18
LOCATION C41 ANECH CH AERO. RDG. ADH183 PAMB 29.4550 RELHUM 31.30

MODEL TEST POINT ACUSTIC RANGE ACCUSTIC RANGE SIZE FREE-JET SPEED
0300 0306 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 117.35 M/SEC (386.0 FPS)

285

07/19/79 17.289

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X03060

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PVL

FREQ

50

63

80

100

125

160

200

250 73.7 94.9 93.8 93.4 91.5 91.5 92.1 93.1 97.3 104.0 108.4 112.5 112.7 145.6
315 73.7 94.9 93.8 93.4 93.0 92.8 92.4 93.7 95.1 108.4 112.3 115.0 113.1 148.1
400 74.6 95.4 94.5 93.0 93.8 93.2 93.7 94.9 101.9 111.2 115.6 117.1 114.0 150.5
500 74.0 96.0 96.5 93.7 94.2 94.3 94.9 96.7 104.3 113.2 117.5 118.2 113.6 151.9
630 78.5 96.7 97.5 95.1 96.6 95.5 96.2 98.3 107.0 114.3 119.2 117.9 114.2 152.8
800 83.6 97.9 98.6 96.4 97.2 97.9 97.7 100.7 108.2 115.6 119.6 116.8 115.0 153.2
1000 89.1 100.9 100.2 99.9 98.7 99.1 98.7 101.4 109.3 115.1 121.1 116.1 114.8 153.8
1250 96.5 105.3 102.3 100.2 102.3 101.1 100.1 103.1 109.9 116.0 121.4 116.2 115.2 154.3
1600 105.9 116.0 111.7 105.7 106.1 102.5 101.7 104.2 111.3 117.1 121.3 115.9 114.9 155.6
2000 109.5 117.0 116.7 111.6 111.0 106.0 103.3 104.7 111.3 118.2 120.0 116.5 114.5 156.5
2500 104.2 112.7 114.2 113.5 112.5 111.3 107.0 106.0 112.8 117.9 118.4 114.3 113.9 155.7
3150 106.0 112.6 112.7 111.9 109.1 110.7 110.0 108.7 113.0 117.3 117.2 112.4 112.1 155.0
4000 103.9 110.3 111.0 109.4 108.4 107.7 109.4 110.1 113.4 116.9 116.0 111.0 110.2 154.1
5000 103.0 109.0 110.6 109.3 109.4 108.4 111.4 113.6 116.4 115.0 109.1 109.4 153.9
6300 102.6 108.8 110.0 108.8 109.3 109.6 108.8 110.9 113.2 114.4 113.9 107.9 108.4 153.4
8000 104.0 110.3 111.5 108.7 108.3 108.5 107.8 108.5 112.1 113.9 111.9 107.1 107.8 153.2
10000 101.0 108.8 108.8 107.7 109.4 108.1 106.8 109.0 110.3 112.3 109.9 105.7 106.6 152.6
12500 102.6 109.2 108.3 107.7 108.3 107.7 105.3 107.0 109.7 111.5 108.2 106.1 107.4 152.8
16000 99.5 107.2 107.2 106.2 107.8 107.1 105.4 106.1 107.7 109.1 106.2 104.2 106.6 152.6
20000 97.2 105.2 106.2 105.5 106.8 105.4 102.3 103.7 106.8 105.8 104.0 102.9 105.5 152.7
25000 91.9 101.5 101.9 102.5 104.2 102.8 99.6 99.5 102.6 103.6 100.7 95.2 100.2 151.7
31500 90.0 98.1 98.5 96.5 98.7 97.2 96.2 95.7 99.5 100.0 97.2 93.1 98.6 150.7
40000 87.0 92.4 95.2 95.5 96.8 95.2 90.6 91.6 95.3 93.2 91.2 88.3 92.8 150.9
50000 81.9 86.5 88.8 89.2 88.6 87.8 86.3 84.8 91.6 87.2 85.9 82.9 88.0 149.2
63000 73.5 80.5 81.0 81.9 80.1 79.5 80.4 78.2 85.5 83.1 80.7 73.8 78.2 147.8
80000 66.7 73.2 73.0 74.3 73.6 73.7 71.8 71.9 75.7 73.3 70.8 64.0 68.4 146.4

CASPL 115.3 123.0 122.8 120.6 120.3 119.6 118.2 119.5 123.4 127.8 130.2 127.3 125.6 167.0

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MODEL/FULL SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 385.00 REFRACTION CORRECTION - YES
INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-16-78 TAPE NO. N310 ALPHA 3859 TAMB 41.18
LOCATION C41 ANECH CH AERO. RDG. ADH183 PAMB 29.4550 RELHUM 31.30

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
0300 0306 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 117.35 M/SEC (385.0 FPS)

07/19/79 17.289

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 2400.0 FT. SL

IDENTIFICATION - FJ-400-FHJDL X03065

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 59.3 | 75.6 | 75.6 | 75.0 | 76.2 | 75.7 | 76.1 | 76.9 | 83.2 | 92.0 | 94.3 | 93.6 | 87.2 | 188.7 |
| 63 | 52.7 | 76.2 | 77.7 | 75.7 | 76.6 | 76.8 | 77.3 | 78.7 | 85.6 | 93.5 | 96.1 | 94.6 | 86.7 | 170.0 |
| 80 | 57.1 | 76.9 | 77.7 | 77.0 | 79.0 | 78.0 | 78.6 | 80.3 | 88.2 | 94.5 | 97.8 | 94.2 | 87.2 | 170.9 |
| 100 | 62.1 | 78.0 | 79.6 | 78.3 | 79.6 | 80.3 | 80.0 | 82.6 | 89.4 | 95.7 | 98.2 | 93.2 | 87.6 | 171.3 |
| 125 | 67.6 | 80.9 | 81.3 | 81.7 | 80.9 | 81.5 | 80.9 | 83.2 | 90.4 | 95.1 | 99.5 | 92.3 | 87.4 | 172.0 |
| 160 | 74.8 | 85.1 | 83.3 | 81.9 | 84.5 | 83.4 | 82.2 | 84.7 | 90.9 | 95.9 | 99.6 | 92.0 | 87.4 | 172.4 |
| 200 | 83.8 | 95.7 | 92.5 | 87.2 | 88.1 | 84.6 | 83.7 | 85.7 | 92.0 | 96.7 | 99.3 | 91.4 | 86.7 | 173.7 |
| 250 | 87.2 | 96.4 | 97.2 | 93.1 | 92.8 | 88.0 | 85.1 | 86.0 | 91.6 | 97.5 | 97.6 | 91.6 | 85.9 | 174.6 |
| 315 | 81.4 | 91.7 | 94.5 | 91.5 | 94.0 | 92.9 | 88.6 | 87.1 | 93.0 | 96.9 | 95.6 | 88.6 | 84.2 | 173.6 |
| 400 | 82.7 | 91.4 | 92.6 | 92.6 | 90.3 | 92.1 | 91.2 | 89.4 | 92.9 | 96.0 | 93.9 | 86.3 | 81.4 | 173.1 |
| 500 | 80.1 | 89.0 | 90.6 | 89.8 | 89.3 | 88.7 | 90.4 | 90.6 | 93.0 | 95.1 | 92.3 | 84.3 | 78.5 | 172.2 |
| 630 | 78.7 | 85.9 | 89.8 | 89.4 | 90.0 | 89.8 | 89.0 | 91.6 | 92.6 | 94.3 | 90.7 | 81.7 | 76.7 | 172.0 |
| 800 | 77.9 | 86.3 | 88.9 | 88.7 | 89.7 | 90.2 | 89.2 | 90.7 | 92.2 | 91.9 | 89.2 | 79.6 | 74.5 | 171.5 |
| 1000 | 76.8 | 87.4 | 90.2 | 88.4 | 88.6 | 88.9 | 88.0 | 89.2 | 90.6 | 91.0 | 85.8 | 78.5 | 72.8 | 171.3 |
| 1250 | 75.3 | 85.6 | 87.3 | 87.2 | 89.6 | 89.4 | 87.0 | 88.5 | 88.7 | 89.1 | 84.2 | 76.1 | 70.1 | 170.7 |
| 1600 | 76.1 | 85.5 | 87.6 | 87.5 | 88.2 | 87.8 | 85.2 | 86.2 | 87.7 | 87.7 | 81.6 | 76.1 | 68.6 | 171.0 |
| 2000 | 72.0 | 82.8 | 84.9 | 85.2 | 87.5 | 87.0 | 85.0 | 85.3 | 84.7 | 78.7 | 71.6 | 64.6 | 60.7 | 170.7 |
| 2500 | 67.9 | 79.6 | 83.0 | 83.6 | 85.9 | 84.8 | 81.4 | 82.0 | 83.6 | 80.2 | 74.7 | 67.5 | 59.7 | 170.6 |
| 3150 | 58.2 | 73.4 | 76.8 | 79.2 | 82.0 | 80.9 | 77.4 | 76.3 | 77.5 | 75.6 | 68.0 | 55.4 | 45.1 | 169.8 |
| 4000 | 51.1 | 65.3 | 69.6 | 70.0 | 73.5 | 72.4 | 71.0 | 69.1 | 70.5 | 67.3 | 58.3 | 43.8 | 29.0 | 168.8 |
| 5000 | 38.3 | 52.1 | 60.1 | 63.6 | 66.5 | 65.5 | 60.4 | 59.7 | 60.2 | 52.9 | 42.5 | 25.3 | 1.3 | 169.1 |
| 6300 | 15.4 | 32.0 | 41.6 | 46.4 | 48.2 | 48.2 | 46.0 | 42.1 | 44.4 | 32.7 | 19.4 | | 167.4 | |
| 8000 | | 1.1 | 12.4 | 19.9 | 21.7 | 22.2 | 21.9 | 16.2 | 16.9 | 3.6 | | | 165.9 | |
| 10000 | | | | | | | | | | | | | 164.6 | |

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|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| GASPL | 91.9 | 101.7 | 102.5 | 101.1 | 101.1 | 100.4 | 99.0 | 98.7 | 103.0 | 106.7 | 108.0 | 102.5 | 96.7 | 185.0 |
| PWL | 97.4 | 107.5 | 109.0 | 108.1 | 109.4 | 108.6 | 106.8 | 107.2 | 109.5 | 111.7 | 110.8 | 104.0 | 98.2 | |
| PWL | 98.5 | 108.9 | 110.1 | 109.2 | 110.7 | 109.6 | 107.3 | 107.2 | 110.2 | 111.7 | 110.8 | 104.0 | 98.5 | |

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-16-79 TAPE NO. N310 ALPHA 5859 TAPB 41.18
LOCATION C41 ANECH CH AERO. RDG. ADH183 PAPS 29.455d RELNUM 31.30

MODEL TEST POINT 0306 ACOUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CH (1400.00 SQ IN) - FULL 117.35 M/SEC (385.0 FPS) FREE-JET SPEED

07/19/79 17.28/3

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X03070
 BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 63.0 | 69.6 | 69.3 | 69.6 | 90.5 | 92.6 | 95.0 | 96.9 | 99.3 | 106.6 | 111.0 | 114.0 | 113.9 | 147.3 |
| 315 | 65.6 | 69.7 | 69.4 | 90.2 | 92.6 | 94.4 | 96.1 | 97.7 | 101.7 | 108.2 | 112.6 | 115.3 | 114.2 | 148.6 |
| 400 | 69.2 | 69.7 | 91.0 | 90.5 | 92.1 | 94.5 | 95.8 | 96.2 | 102.7 | 112.5 | 115.7 | 117.1 | 114.5 | 150.8 |
| 500 | 71.5 | 90.8 | 92.5 | 92.1 | 93.2 | 96.0 | 96.9 | 99.1 | 103.6 | 113.9 | 117.0 | 118.2 | 114.8 | 151.9 |
| 630 | 74.8 | 92.4 | 92.4 | 93.2 | 95.5 | 96.9 | 98.3 | 101.2 | 105.9 | 114.2 | 117.6 | 118.5 | 116.2 | 152.6 |
| 800 | 79.9 | 92.6 | 95.4 | 94.9 | 96.3 | 96.2 | 99.3 | 102.9 | 108.2 | 114.7 | 117.9 | 118.8 | 117.0 | 153.0 |
| 1000 | 85.9 | 98.2 | 99.8 | 97.6 | 97.6 | 99.5 | 100.9 | 103.8 | 109.3 | 114.3 | 117.5 | 119.1 | 117.0 | 153.1 |
| 1250 | 84.0 | 97.8 | 99.6 | 99.6 | 100.5 | 101.6 | 102.5 | 105.4 | 109.1 | 113.9 | 116.3 | 119.7 | 115.9 | 153.4 |
| 1600 | 87.1 | 96.2 | 97.5 | 99.6 | 101.0 | 102.6 | 105.6 | 110.0 | 113.6 | 116.3 | 118.3 | 114.5 | 115.2 | 152.9 |
| 2000 | 89.1 | 98.8 | 99.6 | 98.1 | 98.7 | 100.1 | 102.4 | 106.1 | 110.6 | 114.7 | 118.4 | 115.9 | 110.6 | 152.4 |
| 2500 | 88.7 | 98.0 | 99.0 | 98.8 | 100.1 | 101.2 | 103.4 | 106.5 | 110.5 | 115.4 | 118.3 | 114.0 | 109.5 | 152.3 |
| 3150 | 90.8 | 99.3 | 99.1 | 98.9 | 99.9 | 101.6 | 103.4 | 107.4 | 110.9 | 114.7 | 117.2 | 113.3 | 108.6 | 151.8 |
| 4000 | 90.7 | 98.8 | 100.0 | 99.0 | 99.6 | 101.2 | 103.3 | 107.0 | 110.3 | 114.5 | 114.8 | 111.7 | 107.0 | 150.7 |
| 5000 | 89.7 | 97.8 | 100.1 | 99.5 | 100.6 | 101.9 | 103.6 | 107.3 | 109.6 | 114.5 | 114.3 | 110.7 | 106.0 | 150.6 |
| 6300 | 87.6 | 97.3 | 100.0 | 100.0 | 100.7 | 103.1 | 103.3 | 105.7 | 109.6 | 113.5 | 112.7 | 108.2 | 105.9 | 150.0 |
| 8000 | 87.4 | 97.2 | 98.8 | 99.4 | 101.1 | 102.0 | 103.1 | 105.9 | 109.0 | 112.2 | 111.3 | 108.2 | 104.0 | 149.3 |
| 10000 | 84.8 | 96.6 | 98.4 | 99.2 | 101.3 | 102.9 | 102.3 | 105.7 | 107.7 | 111.0 | 110.0 | 107.4 | 103.3 | 149.0 |
| 12500 | 83.0 | 94.1 | 96.5 | 98.3 | 100.3 | 101.6 | 101.6 | 104.0 | 104.9 | 108.7 | 108.2 | 105.1 | 102.3 | 147.9 |
| 16000 | 80.4 | 93.2 | 95.7 | 97.0 | 99.6 | 101.3 | 100.0 | 102.5 | 103.6 | 106.9 | 105.3 | 103.2 | 100.1 | 147.5 |
| 20000 | 75.5 | 90.6 | 93.1 | 94.9 | 98.6 | 99.4 | 97.4 | 99.0 | 101.3 | 103.2 | 102.3 | 99.9 | 96.4 | 146.5 |
| 25000 | 74.9 | 87.8 | 90.3 | 91.0 | 95.6 | 96.7 | 93.8 | 94.1 | 93.2 | 98.3 | 97.4 | 95.9 | 94.7 | 145.0 |
| 31500 | 72.8 | 83.2 | 88.4 | 89.9 | 90.6 | 90.9 | 90.0 | 91.4 | 94.9 | 97.2 | 94.7 | 91.0 | 90.3 | 145.0 |
| 40000 | 68.8 | 78.0 | 83.4 | 84.5 | 88.9 | 88.6 | 85.2 | 87.0 | 89.6 | 92.0 | 90.4 | 85.6 | 85.3 | 144.6 |
| 50000 | 62.2 | 73.4 | 76.0 | 78.1 | 81.0 | 81.9 | 80.2 | 79.9 | 84.6 | 85.8 | 84.8 | 81.4 | 79.7 | 142.9 |
| 63000 | 56.4 | 67.7 | 70.7 | 72.2 | 73.3 | 73.2 | 74.5 | 73.4 | 79.9 | 79.8 | 79.3 | 74.9 | 74.6 | 142.2 |
| 80000 | 51.7 | 60.2 | 66.0 | 67.1 | 68.0 | 67.9 | 66.9 | 67.7 | 74.7 | 75.2 | 74.1 | 67.4 | 67.0 | 143.7 |
| OASPL | 99.0 | 109.1 | 110.7 | 110.6 | 112.0 | 113.5 | 114.4 | 117.6 | 121.1 | 126.0 | 128.6 | 128.5 | 125.6 | 164.3 |

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TEST DATE 03-16-78 TAPE NO. N310 ALPHA SB59 TAMB 39.74
 LOCATION C41 ANECH CH AERO. RDG. ADH174 PAMB 29.4700 RELNUM 33.60

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 0. FREE-JET SPEED
 0300 0307 M/SEC (0. FPS)

07/19/79 17.289

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 88 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X03070

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 63.0 | 69.6 | 69.3 | 69.6 | 69.5 | 92.6 | 95.0 | 96.9 | 99.3 | 106.6 | 111.0 | 114.0 | 113.9 | 147.3 |
| 315 | 65.6 | 66.7 | 69.4 | 90.2 | 92.6 | 94.4 | 95.1 | 97.7 | 101.7 | 108.2 | 112.6 | 116.3 | 114.2 | 148.6 |
| 400 | 69.2 | 69.7 | 91.0 | 90.5 | 92.1 | 94.5 | 95.8 | 98.2 | 102.7 | 112.5 | 115.7 | 117.1 | 114.5 | 150.8 |
| 500 | 71.5 | 90.8 | 92.5 | 92.1 | 93.2 | 95.0 | 96.9 | 99.1 | 103.8 | 113.9 | 117.0 | 118.2 | 114.8 | 151.9 |
| 630 | 74.8 | 92.4 | 93.4 | 93.2 | 95.3 | 96.9 | 98.3 | 101.2 | 105.9 | 114.2 | 117.6 | 118.5 | 116.2 | 152.6 |
| 800 | 79.9 | 92.6 | 95.4 | 94.9 | 96.3 | 98.2 | 99.3 | 102.9 | 108.2 | 114.7 | 117.9 | 118.8 | 117.0 | 153.0 |
| 1000 | 85.9 | 98.2 | 99.8 | 97.5 | 97.6 | 99.5 | 100.9 | 103.8 | 109.3 | 114.3 | 117.5 | 119.1 | 117.0 | 153.1 |
| 1250 | 84.0 | 97.8 | 99.6 | 99.6 | 100.5 | 101.8 | 102.5 | 105.4 | 109.1 | 113.9 | 116.3 | 119.7 | 115.9 | 153.4 |
| 1600 | 87.1 | 96.2 | 97.5 | 97.5 | 99.6 | 101.0 | 102.6 | 105.8 | 110.0 | 113.8 | 116.3 | 118.5 | 114.5 | 152.9 |
| 2000 | 89.1 | 98.8 | 99.6 | 98.1 | 98.7 | 100.1 | 102.4 | 106.1 | 110.6 | 114.7 | 118.4 | 118.9 | 110.6 | 152.4 |
| 2500 | 88.7 | 98.0 | 99.0 | 98.8 | 100.1 | 101.2 | 103.4 | 106.5 | 110.5 | 115.4 | 118.3 | 114.0 | 109.5 | 152.3 |
| 3150 | 90.8 | 99.3 | 99.1 | 98.9 | 99.9 | 101.6 | 103.4 | 107.4 | 110.9 | 114.7 | 117.2 | 113.3 | 108.6 | 151.8 |
| 4000 | 90.7 | 98.8 | 100.0 | 99.0 | 99.6 | 101.2 | 103.3 | 107.0 | 110.3 | 114.5 | 114.8 | 111.7 | 107.0 | 150.7 |
| 5000 | 89.7 | 97.8 | 100.1 | 99.5 | 100.6 | 101.9 | 103.6 | 107.3 | 109.6 | 114.5 | 114.3 | 110.7 | 106.0 | 150.6 |
| 6300 | 87.6 | 97.3 | 100.0 | 100.0 | 100.7 | 103.1 | 103.3 | 106.7 | 109.6 | 113.5 | 112.7 | 109.2 | 105.9 | 150.0 |
| 8000 | 87.4 | 97.2 | 98.8 | 99.4 | 101.1 | 102.0 | 103.1 | 106.0 | 109.0 | 112.2 | 111.3 | 108.2 | 104.0 | 149.3 |
| 10000 | 84.8 | 95.6 | 98.4 | 99.2 | 101.3 | 102.9 | 102.3 | 105.7 | 107.7 | 111.0 | 110.0 | 107.4 | 103.3 | 149.0 |
| 12500 | 83.0 | 94.1 | 96.5 | 98.3 | 100.3 | 101.6 | 101.8 | 104.0 | 104.9 | 108.7 | 108.2 | 105.1 | 102.3 | 147.9 |
| 16000 | 80.4 | 93.2 | 95.7 | 97.0 | 99.6 | 101.3 | 100.0 | 102.5 | 103.6 | 106.9 | 105.3 | 103.2 | 100.1 | 147.5 |
| 20000 | 75.5 | 90.6 | 93.1 | 94.9 | 98.6 | 99.4 | 97.4 | 99.0 | 101.3 | 103.2 | 102.3 | 99.9 | 96.4 | 146.5 |
| 25000 | 74.9 | 87.8 | 90.3 | 91.0 | 95.6 | 96.7 | 93.8 | 94.1 | 98.2 | 98.3 | 97.4 | 95.9 | 94.7 | 145.0 |
| 31500 | 72.8 | 83.2 | 88.4 | 89.9 | 90.6 | 90.9 | 90.0 | 91.4 | 94.9 | 97.2 | 94.7 | 91.0 | 90.3 | 145.0 |
| 40000 | 68.8 | 78.0 | 83.4 | 84.5 | 88.9 | 88.6 | 85.2 | 87.0 | 89.6 | 92.0 | 90.4 | 85.6 | 85.3 | 144.6 |
| 50000 | 62.2 | 73.4 | 76.0 | 78.1 | 81.0 | 81.9 | 80.2 | 79.9 | 84.6 | 85.8 | 84.8 | 81.4 | 79.7 | 142.9 |
| 63000 | 56.4 | 67.7 | 70.7 | 72.2 | 73.3 | 73.2 | 74.5 | 73.4 | 79.9 | 79.8 | 79.3 | 74.9 | 74.6 | 142.2 |
| 80000 | 51.7 | 60.2 | 66.0 | 67.1 | 68.0 | 67.9 | 66.9 | 67.7 | 74.7 | 75.2 | 74.1 | 67.4 | 67.0 | 143.7 |
| 0ASPL | 99.0 | 109.1 | 110.7 | 110.6 | 112.0 | 113.5 | 114.4 | 117.6 | 121.1 | 126.0 | 128.6 | 128.5 | 125.6 | 164.3 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 0. | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|-------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 03-16-78 | TAPE NO. | N310 | ALPHA | 3859 | TAMB | 39.74 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH174 | PAMB | 29.4700 | RELHUM | 38.60 |

| MODEL | TEST POINT | ACOUSTIC RANGE | 12.2 M (40.0 FT) ARC | 139.0 SQ CM (21.55 SQ IN) - SIZE | MODEL | 0. | FREE-JET SPEED |
|-------|------------|----------------|-----------------------|-----------------------------------|-------|----|-----------------|
| 0300 | 0307 | | | | | | M/SEC (O. FPS) |

07/19/79 17.289

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X03075

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 47.6 | 69.9 | 72.2 | 72.5 | 74.5 | 77.0 | 78.3 | 80.3 | 84.0 | 92.7 | 94.3 | 93.6 | 87.7 | 188.9 |
| 63 | 50.1 | 71.0 | 73.8 | 74.1 | 75.6 | 78.6 | 79.3 | 81.1 | 85.1 | 94.1 | 95.6 | 94.6 | 87.9 | 170.0 |
| 80 | 53.4 | 72.5 | 74.6 | 75.1 | 77.9 | 79.4 | 80.6 | 83.1 | 87.1 | 94.4 | 96.4 | 94.9 | 89.2 | 170.7 |
| 100 | 58.4 | 72.7 | 76.6 | 76.9 | 78.6 | 80.6 | 81.6 | 84.9 | 89.3 | 94.8 | 96.4 | 95.1 | 89.8 | 171.1 |
| 125 | 64.4 | 78.2 | 80.8 | 79.4 | 79.9 | 81.9 | 83.1 | 85.6 | 90.3 | 94.3 | 95.9 | 95.3 | 89.6 | 171.2 |
| 160 | 62.3 | 77.7 | 80.6 | 81.3 | 82.6 | 84.1 | 84.6 | 87.1 | 90.1 | 93.8 | 95.5 | 95.6 | 88.1 | 171.6 |
| 200 | 65.1 | 75.9 | 78.3 | 79.1 | 81.6 | 83.1 | 84.6 | 87.3 | 90.8 | 93.5 | 96.3 | 93.8 | 86.3 | 171.0 |
| 250 | 66.7 | 78.2 | 80.1 | 79.4 | 80.5 | 82.0 | 84.2 | 87.4 | 91.1 | 94.0 | 96.0 | 91.0 | 81.7 | 170.6 |
| 315 | 66.0 | 77.0 | 79.3 | 79.8 | 81.6 | 82.9 | 84.9 | 87.6 | 90.8 | 94.4 | 95.5 | 86.6 | 79.8 | 170.5 |
| 400 | 67.5 | 78.0 | 79.0 | 79.6 | 81.1 | 82.9 | 84.6 | 88.1 | 90.8 | 93.3 | 93.9 | 87.3 | 77.9 | 169.9 |
| 500 | 66.9 | 77.0 | 79.6 | 79.5 | 80.5 | 82.3 | 84.3 | 87.5 | 89.9 | 92.7 | 91.1 | 85.0 | 75.3 | 168.9 |
| 630 | 65.4 | 75.6 | 79.3 | 79.7 | 81.2 | 82.8 | 84.2 | 87.4 | 88.8 | 92.3 | 90.1 | 83.3 | 73.2 | 168.7 |
| 800 | 62.9 | 74.7 | 79.0 | 79.9 | 81.1 | 83.7 | 83.7 | 86.6 | 88.6 | 90.9 | 88.0 | 81.1 | 72.0 | 168.1 |
| 1000 | 62.3 | 74.3 | 77.5 | 79.1 | 81.4 | 82.5 | 83.3 | 85.7 | 87.7 | 89.3 | 86.2 | 79.4 | 68.9 | 167.5 |
| 1250 | 59.1 | 72.4 | 76.9 | 78.8 | 81.4 | 83.2 | 82.5 | 85.2 | 86.2 | 87.8 | 84.3 | 77.9 | 66.8 | 167.1 |
| 1600 | 56.5 | 70.3 | 74.5 | 77.4 | 80.1 | 81.7 | 81.7 | 83.2 | 82.9 | 84.9 | 81.6 | 74.2 | 63.5 | 166.0 |
| 2000 | 52.9 | 68.8 | 73.4 | 75.9 | 79.3 | 81.2 | 79.7 | 81.4 | 81.2 | 82.5 | 77.8 | 70.6 | 59.3 | 165.7 |
| 2500 | 46.2 | 65.0 | 69.9 | 73.2 | 77.7 | 78.8 | 76.5 | 77.3 | 78.1 | 77.6 | 73.0 | 64.6 | 49.6 | 164.6 |
| 3150 | 42.3 | 59.7 | 65.2 | 67.8 | 73.3 | 74.8 | 71.5 | 70.8 | 73.1 | 70.3 | 64.7 | 55.6 | 39.6 | 163.2 |
| 4000 | 33.9 | 50.4 | 59.4 | 63.3 | 65.4 | 66.0 | 64.8 | 64.8 | 66.0 | 64.4 | 55.8 | 41.8 | 20.7 | 163.1 |
| 5000 | 20.2 | 37.7 | 48.2 | 52.5 | 58.9 | 55.0 | 55.0 | 54.5 | 51.7 | 41.6 | 22.6 | | 162.8 | |
| 6300 | 16.8 | 28.8 | 35.3 | 40.6 | 42.4 | 39.8 | 37.2 | 37.3 | 31.2 | 18.3 | | | 161.0 | |
| 8000 | | 2.2 | 10.2 | 14.6 | 15.9 | 16.0 | 11.4 | 11.3 | 0.5 | | | | 160.4 | |
| 10000 | | | | | | | | | | | | | 161.6 | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| OASPL | 75.6 | 87.7 | 90.5 | 91.0 | 92.9 | 94.6 | 95.5 | 96.2 | 101.1 | 105.0 | 106.2 | 103.6 | 97.3 | 182.3 |
| PNL | 80.6 | 93.3 | 96.8 | 98.5 | 101.4 | 103.0 | 102.6 | 104.7 | 106.8 | 109.5 | 109.4 | 105.0 | 97.0 | |
| PNLT | 81.3 | 93.8 | 96.8 | 98.5 | 102.7 | 104.0 | 102.6 | 104.7 | 106.8 | 110.1 | 110.4 | 106.0 | 97.0 | |

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-16-78 TAPE NO. N310 ALPHA SB59 TAMB 39.74
 LOCATION C41 ANECH CH AERD. RDG. ADH174 PAMB 29.4700 RELHUM 38.60

MODEL TEST POINT 0307 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. FREE-JET SPEED M/SEC (O. FPS)

07/19/79 17.289

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X03080
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

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MODEL TEST POINT 0308 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CH (21.55 SQ IN) - MODEL 3859 SIZE 38.09 M/SEC (289.0 FPS) FREE-JET SPEED

201

TEST DATE 03-16-78 TAPE NO. N310 ALPHA 3859 TAMB 40.10
LOCATION C41 ANECH CH AERO. RDG. ADH175 PAMB 29.4600 RELHUM 36.80

07/19/79 17.289

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X03080

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | |
| 250 | 66.8 | 91.3 | 90.2 | 89.6 | 88.9 | 89.6 | 89.8 | 91.2 | 95.3 | 101.7 | 105.9 | 109.9 | 108.1 |
| 315 | 66.8 | 91.2 | 90.2 | 89.7 | 90.2 | 90.5 | 90.3 | 91.9 | 97.5 | 106.6 | 110.4 | 112.4 | 110.3 |
| 400 | 67.2 | 91.0 | 90.3 | 90.0 | 90.5 | 90.8 | 91.2 | 93.3 | 99.2 | 109.2 | 113.1 | 114.1 | 110.5 |
| 500 | 73.2 | 92.0 | 92.1 | 91.8 | 91.4 | 92.4 | 92.8 | 94.2 | 101.8 | 109.6 | 113.9 | 114.8 | 109.6 |
| 630 | 74.9 | 92.9 | 93.7 | 93.0 | 93.2 | 94.1 | 94.1 | 96.6 | 103.9 | 110.3 | 114.2 | 114.5 | 109.1 |
| 800 | 78.0 | 93.7 | 94.4 | 94.3 | 94.3 | 94.9 | 95.1 | 98.3 | 108.2 | 110.9 | 113.7 | 113.6 | 108.4 |
| 1000 | 82.6 | 93.5 | 95.2 | 95.4 | 95.7 | 96.1 | 96.4 | 99.2 | 106.2 | 112.2 | 115.7 | 112.5 | 107.1 |
| 1250 | 85.2 | 95.4 | 97.3 | 98.2 | 97.3 | 98.3 | 98.1 | 100.7 | 106.5 | 110.6 | 113.9 | 111.6 | 106.3 |
| 1600 | 86.7 | 99.0 | 99.8 | 97.4 | 97.4 | 98.5 | 98.6 | 101.3 | 106.9 | 111.2 | 113.3 | 110.1 | 105.7 |
| 2000 | 88.9 | 96.6 | 97.9 | 97.2 | 96.8 | 97.5 | 98.8 | 102.0 | 106.8 | 112.4 | 114.7 | 111.0 | 106.9 |
| 2500 | 89.4 | 97.5 | 98.0 | 97.5 | 98.1 | 98.8 | 99.9 | 102.3 | 108.4 | 112.0 | 114.0 | 110.8 | 106.4 |
| 3150 | 90.8 | 98.7 | 99.2 | 98.4 | 98.2 | 99.4 | 100.2 | 103.4 | 107.9 | 111.3 | 112.7 | 108.1 | 104.7 |
| 4000 | 92.4 | 98.7 | 99.4 | 99.2 | 98.4 | 99.8 | 100.4 | 103.8 | 107.9 | 112.0 | 111.6 | 107.0 | 103.8 |
| 5000 | 93.7 | 99.9 | 100.9 | 100.4 | 100.1 | 100.1 | 101.5 | 104.2 | 108.8 | 111.6 | 111.1 | 105.9 | 104.2 |
| 6300 | 92.1 | 99.4 | 100.7 | 101.2 | 101.3 | 102.0 | 101.6 | 104.1 | 108.6 | 111.1 | 110.0 | 105.0 | 103.0 |
| 8000 | 92.8 | 100.2 | 101.4 | 101.1 | 101.9 | 102.5 | 102.5 | 104.2 | 107.5 | 110.1 | 108.3 | 103.9 | 102.2 |
| 10000 | 95.0 | 101.5 | 101.2 | 101.2 | 102.0 | 102.9 | 101.7 | 104.5 | 105.7 | 108.0 | 106.5 | 102.8 | 101.5 |
| 12500 | 93.0 | 100.7 | 102.0 | 101.2 | 102.2 | 101.6 | 101.0 | 102.8 | 104.7 | 107.3 | 104.6 | 102.2 | 101.1 |
| 16000 | 90.7 | 98.7 | 99.7 | 100.6 | 101.8 | 102.0 | 99.8 | 101.6 | 103.6 | 104.8 | 102.9 | 101.0 | 101.8 |
| 20000 | 90.2 | 97.8 | 99.0 | 98.3 | 101.3 | 100.6 | 97.7 | 99.6 | 102.3 | 101.6 | 100.1 | 98.9 | 101.3 |
| 25000 | 84.0 | 94.6 | 95.0 | 95.1 | 98.7 | 97.9 | 95.5 | 95.3 | 99.0 | 100.1 | 97.1 | 93.1 | 94.4 |
| 31500 | 82.3 | 91.0 | 92.7 | 93.5 | 93.5 | 92.5 | 91.8 | 92.3 | 94.7 | 95.6 | 93.3 | 88.3 | 90.5 |
| 40000 | 79.8 | 85.8 | 89.8 | 88.5 | 91.8 | 91.2 | 86.5 | 87.3 | 90.2 | 89.1 | 85.5 | 85.1 | 87.1 |
| 50000 | 75.0 | 80.2 | 84.0 | 82.2 | 84.1 | 83.5 | 82.2 | 80.8 | 86.3 | 82.8 | 81.9 | 78.4 | 79.9 |
| 63000 | 66.9 | 74.4 | 75.5 | 76.1 | 75.7 | 75.6 | 75.7 | 73.9 | 81.3 | 78.9 | 77.5 | 70.9 | 73.3 |
| 80000 | 60.6 | 66.4 | 67.9 | 71.2 | 69.1 | 69.3 | 67.4 | 67.6 | 71.5 | 69.1 | 67.7 | 61.1 | 63.5 |

GASPL 102.9 110.8 111.7 111.4 112.0 112.4 112.1 114.6 119.0 123.1 125.1 123.6 119.7 161.5

| MODEL/FULL SIZE SCALE FACTOR | INPUT 1.000 | SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 289.00 | REFRACTION CORRECTION - YES |
|------------------------------|-------------|--------------|----------------------------|--------|-----------------------------|
| | | | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 03-16-78 | TAPE NO. | N310 | ALPHA | SB59 | TAPB | 40.10 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH175 | PAMB | 29.4600 | RELHUM | 36.80 |

| MODEL | TEST POINT | ACQUSTIC RANGE | 12.2 M (40.0 FT) | ARC | 139.0 SQ CM (21.56 SQ IN) | MODEL | FREE-JET SPEED |
|-------|------------|----------------|-------------------|-----|----------------------------|-------|--------------------------|
| 0300 | 0308 | | | | | | 88.09 M/SEC (289.0 FPS) |

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OF POOR QUALITY.

07/19/79 17.289

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X03085

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 45.9 | 71.2 | 71.6 | 72.0 | 72.9 | 73.4 | 73.6 | 75.3 | 80.5 | 89.4 | 91.8 | 90.6 | 83.7 | 165.8 |
| 63 | 51.8 | 72.2 | 73.3 | 73.8 | 75.0 | 75.1 | 76.1 | 76.1 | 83.0 | 89.6 | 92.5 | 91.2 | 82.7 | 166.5 |
| 80 | 53.5 | 73.0 | 74.9 | 74.9 | 75.6 | 76.6 | 76.4 | 78.6 | 85.2 | 90.4 | 92.9 | 90.8 | 82.0 | 166.7 |
| 100 | 56.5 | 73.8 | 75.6 | 76.2 | 76.7 | 77.4 | 77.4 | 80.3 | 86.4 | 91.0 | 92.2 | 89.9 | 81.2 | 166.5 |
| 125 | 61.0 | 73.5 | 76.3 | 77.2 | 78.0 | 78.5 | 78.7 | 81.0 | 87.3 | 92.2 | 94.1 | 88.6 | 79.7 | 167.4 |
| 160 | 63.5 | 75.2 | 78.3 | 79.9 | 79.5 | 80.5 | 80.2 | 82.4 | 87.5 | 90.4 | 92.1 | 87.4 | 78.5 | 166.3 |
| 200 | 64.6 | 78.6 | 80.5 | 78.5 | 79.4 | 80.6 | 80.3 | 82.8 | 87.7 | 90.9 | 91.2 | 85.6 | 77.4 | 166.1 |
| 250 | 66.6 | 76.0 | 78.4 | 78.5 | 78.6 | 79.4 | 80.6 | 83.3 | 87.4 | 91.8 | 92.3 | 86.1 | 78.0 | 167.1 |
| 315 | 68.6 | 76.5 | 78.2 | 78.5 | 79.6 | 80.5 | 81.4 | 83.4 | 88.7 | 91.0 | 91.3 | 86.4 | 78.7 | 167.0 |
| 400 | 67.5 | 77.3 | 79.1 | 79.1 | 79.4 | 80.7 | 81.4 | 84.1 | 87.6 | 89.9 | 89.4 | 82.0 | 74.0 | 166.1 |
| 500 | 68.6 | 76.9 | 78.0 | 79.6 | 79.3 | 80.9 | 81.3 | 84.3 | 87.4 | 90.2 | 87.9 | 80.3 | 72.1 | 166.1 |
| 630 | 69.5 | 77.7 | 80.1 | 80.5 | 80.8 | 81.0 | 82.1 | 84.3 | 88.0 | 89.4 | 86.9 | 78.5 | 71.4 | 166.3 |
| 800 | 67.4 | 76.9 | 79.7 | 81.0 | 81.7 | 82.5 | 82.0 | 84.0 | 87.5 | 88.5 | 85.2 | 76.8 | 69.1 | 166.1 |
| 1000 | 67.6 | 77.3 | 80.1 | 80.5 | 82.1 | 82.9 | 82.8 | 83.9 | 86.2 | 87.2 | 83.1 | 75.1 | 67.2 | 165.8 |
| 1250 | 69.3 | 78.3 | 79.7 | 80.7 | 82.1 | 83.2 | 81.9 | 84.0 | 84.1 | 84.8 | 80.8 | 73.2 | 62.0 | 165.4 |
| 1600 | 66.5 | 76.9 | 80.0 | 80.4 | 82.0 | 81.6 | 80.9 | 82.0 | 82.7 | 83.5 | 78.1 | 71.2 | 62.3 | 165.4 |
| 2000 | 63.2 | 74.3 | 79.6 | 81.5 | 81.9 | 79.4 | 80.5 | 81.2 | 80.4 | 76.4 | 69.4 | 69.9 | 65.5 | 165.6 |
| 2500 | 60.9 | 72.2 | 75.8 | 76.6 | 80.4 | 80.0 | 76.8 | 77.9 | 79.1 | 76.0 | 70.8 | 63.5 | 54.6 | 165.6 |
| 3150 | 61.3 | 66.5 | 70.7 | 71.9 | 76.5 | 75.9 | 73.2 | 72.0 | 73.9 | 72.1 | 64.4 | 62.7 | 39.2 | 164.9 |
| 4000 | 43.4 | 58.2 | 63.8 | 67.2 | 68.3 | 67.7 | 66.5 | 65.7 | 65.8 | 62.9 | 54.4 | 39.0 | 20.6 | 164.0 |
| 5000 | 31.1 | 45.5 | 54.5 | 56.8 | 61.8 | 61.6 | 56.2 | 55.3 | 55.1 | 48.6 | 39.8 | 32.1 | | 164.1 |
| 6300 | 8.5 | 25.6 | 36.8 | 39.4 | 43.8 | 44.3 | 41.9 | 38.1 | 39.1 | 28.2 | 15.5 | | | 162.4 |
| 8000 | | | 6.9 | 14.1 | 17.2 | 18.3 | 17.3 | 11.9 | 12.8 | | | | | 161.4 |
| 10000 | | | | | | | | | | | | | | 160.3 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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OASPL 78.2 66.6 90.8 91.4 92.4 93.1 92.8 94.9 98.7 102.0 102.6 98.8 90.6 179.4
PNL 85.4 96.5 99.4 100.6 102.6 102.7 101.3 102.7 105.1 105.8 105.7 99.7 91.1
PNLT 66.6 96.5 100.1 100.6 103.8 104.0 101.9 102.7 105.7 106.8 106.8 99.7 32.2

DIAMETER RATIO 6.061 FREQUENCY SHIFT -9

TEST DATE 03-18-78 TAPE NO. N310 ALPHA SB59 TAPB 40.10
LOCATION C41 ANECH CH AERO. RDG. ADH175 PAMB 29.4600 RELHUM 36.90

MODEL TEST POINT ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 88.09 M/SEC (289.0 FPS)
0308

07/19/79 17.289

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FM3DL X03090
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 84.0 | 84.6 | 85.4 | 86.6 | 87.9 | 89.3 | 90.1 | 92.8 | 95.2 | 101.3 | 107.2 | 111.0 | 109.9 | 143.6 |
| 315 | 84.0 | 85.3 | 85.3 | 87.4 | 89.3 | 90.2 | 92.6 | 92.6 | 96.6 | 104.2 | 108.6 | 112.3 | 110.0 | 144.9 |
| 400 | 85.1 | 86.4 | 85.9 | 87.7 | 89.9 | 91.0 | 93.7 | 98.2 | 107.8 | 111.7 | 112.8 | 108.5 | 146.3 | |
| 500 | 85.4 | 87.7 | 87.8 | 89.6 | 91.0 | 92.6 | 95.3 | 99.8 | 109.6 | 113.7 | 112.9 | 105.8 | 147.4 | |
| 630 | 86.1 | 88.6 | 88.6 | 90.9 | 92.3 | 94.2 | 96.9 | 102.4 | 110.5 | 114.3 | 111.5 | 102.2 | 147.6 | |
| 800 | 86.8 | 89.9 | 90.4 | 91.5 | 93.6 | 95.3 | 98.7 | 104.2 | 111.2 | 113.9 | 110.0 | 99.2 | 147.4 | |
| 1000 | 86.2 | 91.5 | 90.0 | 92.6 | 95.2 | 96.9 | 100.3 | 105.5 | 111.3 | 112.7 | 107.4 | 97.5 | 146.9 | |
| 1250 | 77.6 | 91.1 | 93.1 | 92.4 | 94.0 | 96.1 | 97.2 | 101.4 | 105.9 | 111.9 | 113.1 | 106.0 | 96.6 | 147.2 |
| 1600 | 80.8 | 90.8 | 92.0 | 92.5 | 94.6 | 97.2 | 98.6 | 101.6 | 107.0 | 111.3 | 112.6 | 104.5 | 95.6 | 147.0 |
| 2000 | 80.8 | 90.8 | 92.1 | 92.4 | 93.5 | 96.1 | 98.7 | 102.4 | 107.4 | 111.5 | 111.4 | 103.6 | 96.1 | 146.7 |
| 2500 | 82.5 | 92.0 | 93.5 | 93.6 | 95.1 | 97.0 | 99.4 | 103.3 | 107.1 | 112.2 | 112.1 | 104.5 | 97.0 | 147.3 |
| 3150 | 86.2 | 94.6 | 93.6 | 93.9 | 95.2 | 98.1 | 100.0 | 104.4 | 108.1 | 111.8 | 112.4 | 105.8 | 97.4 | 147.7 |
| 4000 | 88.2 | 95.6 | 97.6 | 95.6 | 95.1 | 97.5 | 99.6 | 103.8 | 107.6 | 111.2 | 111.1 | 104.0 | 97.5 | 147.0 |
| 5000 | 86.4 | 95.1 | 97.1 | 97.1 | 98.1 | 98.5 | 100.1 | 104.6 | 107.6 | 111.5 | 110.6 | 103.2 | 96.7 | 147.3 |
| 6300 | 85.6 | 94.0 | 96.1 | 96.5 | 97.7 | 100.1 | 100.6 | 104.0 | 107.4 | 111.0 | 108.7 | 101.7 | 95.9 | 146.8 |
| 8000 | 87.7 | 95.2 | 96.0 | 96.3 | 97.9 | 99.8 | 100.8 | 103.4 | 106.7 | 108.9 | 107.6 | 100.4 | 94.7 | 146.1 |
| 10000 | 86.7 | 95.0 | 96.6 | 96.4 | 98.0 | 100.1 | 100.3 | 103.4 | 105.2 | 108.4 | 105.2 | 99.6 | 94.2 | 145.8 |
| 12500 | 85.2 | 94.0 | 96.4 | 96.1 | 97.4 | 98.5 | 99.2 | 101.4 | 103.3 | 105.5 | 103.3 | 97.7 | 92.9 | 144.7 |
| 16000 | 84.5 | 93.2 | 95.6 | 95.5 | 97.9 | 99.2 | 98.1 | 101.0 | 101.2 | 104.2 | 100.4 | 96.5 | 92.2 | 144.9 |
| 20000 | 79.4 | 91.4 | 92.3 | 93.9 | 97.7 | 98.2 | 96.2 | 98.5 | 99.6 | 100.7 | 98.1 | 94.5 | 90.5 | 144.6 |
| 25000 | 78.7 | 88.0 | 89.8 | 90.0 | 94.9 | 95.7 | 93.6 | 93.6 | 97.2 | 96.3 | 94.2 | 91.2 | 89.5 | 143.6 |
| 31500 | 76.8 | 83.9 | 87.8 | 89.6 | 89.9 | 90.1 | 90.1 | 91.1 | 94.3 | 95.1 | 92.0 | 85.6 | 84.1 | 143.9 |
| 40000 | 71.9 | 78.2 | 82.8 | 84.2 | 87.9 | 88.8 | 85.2 | 86.5 | 89.1 | 89.4 | 86.7 | 81.1 | 79.5 | 143.4 |
| 50000 | 65.2 | 73.6 | 75.5 | 77.6 | 80.7 | 81.4 | 80.4 | 79.7 | 84.0 | 81.9 | 80.0 | 75.6 | 73.2 | 141.3 |
| 63000 | 59.9 | 67.9 | 68.9 | 71.2 | 72.0 | 72.9 | 74.6 | 73.1 | 79.3 | 74.8 | 73.0 | 69.4 | 67.4 | 140.2 |
| 80000 | 53.7 | 59.2 | 63.0 | 66.6 | 65.5 | 66.9 | 66.4 | 66.7 | 72.4 | 68.9 | 68.3 | 60.6 | 58.8 | 140.5 |
| 0ASPL | 96.4 | 105.3 | 107.0 | 107.0 | 108.5 | 110.3 | 111.2 | 114.6 | 118.2 | 122.9 | 124.0 | 120.9 | 115.9 | 160.0 |

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TEST DATE 03-16-78 TAPE NO. N310 ALPHA SB59 TAMB 39.92
LOCATION C41 ANECH CH AERO. RDG. ADH76 PAMB 29.4300 RELHUM 35.20

MODEL TEST POINT 0309 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CH (21.55 SQ IN) - MODEL 117.35 M/SEC (322.3 FPS) FREE-JET SPEED

07/19/79 17.262

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODEL X03090

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

| | | | | | | | | | | | | | | |
|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | 50.5 | 51.6 | 50.4 | 59.3 | 58.7 | 57.9 | 58.2 | 59.3 | 93.3 | 100.0 | 103.9 | 106.0 | 107.4 | 141.1 |
| 63 | 70.5 | 91.6 | 90.4 | 89.3 | 89.7 | 89.5 | 88.9 | 89.9 | 96.0 | 104.5 | 108.3 | 110.3 | 108.3 | 143.6 |
| 80 | 71.4 | 92.3 | 91.6 | 89.7 | 90.0 | 90.1 | 90.2 | 91.8 | 98.0 | 107.5 | 111.7 | 112.3 | 108.7 | 146.1 |
| 100 | 800 | 71.0 | 93.1 | 92.7 | 90.9 | 91.3 | 91.6 | 93.5 | 100.5 | 108.2 | 112.3 | 111.6 | 106.6 | 146.2 |
| 125 | 630 | 71.3 | 93.7 | 94.1 | 92.2 | 93.4 | 92.7 | 93.3 | 94.6 | 102.5 | 109.3 | 112.4 | 111.3 | 146.5 |
| 160 | 800 | 78.1 | 95.2 | 95.0 | 93.1 | 94.0 | 94.1 | 94.4 | 96.6 | 104.3 | 109.6 | 111.9 | 109.9 | 147.2 |
| 200 | 1000 | 83.5 | 95.2 | 96.4 | 94.9 | 95.2 | 95.8 | 96.1 | 98.3 | 104.6 | 110.3 | 112.0 | 108.2 | 146.5 |
| 250 | 1250 | 86.4 | 96.6 | 98.0 | 94.6 | 96.7 | 96.8 | 96.5 | 99.4 | 105.9 | 109.9 | 111.6 | 106.7 | 146.3 |
| 315 | 1600 | 87.4 | 99.4 | 99.6 | 97.5 | 97.5 | 98.2 | 98.1 | 100.0 | 106.5 | 110.3 | 110.8 | 106.1 | 146.5 |
| 400 | 2000 | 90.8 | 98.9 | 98.7 | 97.3 | 96.5 | 97.3 | 98.5 | 100.9 | 106.6 | 111.5 | 112.0 | 107.7 | 147.4 |
| 500 | 2500 | 90.8 | 99.3 | 98.9 | 97.3 | 96.4 | 96.5 | 99.5 | 102.2 | 108.3 | 111.7 | 112.9 | 108.5 | 148.3 |
| 630 | 3150 | 92.4 | 100.5 | 100.4 | 98.6 | 98.8 | 100.0 | 100.5 | 103.7 | 108.4 | 111.6 | 112.3 | 108.5 | 148.4 |
| 800 | 4000 | 96.5 | 103.2 | 100.6 | 99.2 | 98.6 | 99.9 | 100.7 | 103.7 | 108.5 | 112.1 | 111.6 | 107.4 | 148.4 |
| 1000 | 5000 | 95.4 | 102.0 | 103.1 | 100.0 | 102.1 | 101.4 | 101.6 | 104.7 | 108.4 | 111.6 | 109.7 | 106.7 | 148.2 |
| 1250 | 6300 | 93.6 | 101.5 | 102.7 | 101.8 | 102.3 | 103.1 | 102.0 | 104.1 | 109.7 | 108.8 | 104.7 | 106.1 | 147.7 |
| 1600 | 8000 | 95.2 | 102.5 | 103.2 | 102.2 | 102.4 | 102.8 | 102.3 | 103.6 | 106.7 | 109.6 | 106.9 | 104.6 | 147.7 |
| 2000 | 10000 | 97.1 | 103.5 | 103.0 | 101.8 | 102.5 | 103.1 | 102.1 | 103.3 | 105.5 | 107.5 | 105.9 | 103.6 | 147.6 |
| 2500 | 12500 | 96.9 | 103.0 | 103.3 | 101.6 | 101.9 | 101.5 | 101.3 | 102.1 | 104.6 | 107.5 | 104.3 | 103.7 | 147.6 |
| 3150 | 16000 | 93.8 | 101.5 | 102.5 | 100.8 | 102.5 | 102.2 | 100.5 | 102.4 | 104.2 | 105.1 | 103.1 | 102.6 | 148.3 |
| 4000 | 20000 | 92.8 | 100.3 | 101.3 | 100.8 | 102.2 | 101.2 | 98.6 | 100.3 | 100.2 | 98.8 | 97.0 | 102.0 | 147.7 |
| 5000 | 25000 | 97.0 | 97.9 | 98.1 | 97.6 | 99.4 | 98.7 | 95.0 | 93.7 | 100.0 | 100.3 | 97.8 | 96.6 | 147.9 |
| 6300 | 31500 | 85.6 | 93.6 | 94.2 | 92.9 | 94.4 | 93.1 | 92.4 | 92.5 | 96.1 | 96.3 | 94.0 | 91.4 | 147.0 |
| 8000 | 40000 | 82.9 | 88.8 | 91.4 | 91.7 | 92.4 | 91.6 | 87.7 | 88.4 | 91.5 | 89.2 | 87.7 | 86.1 | 147.2 |
| 10000 | 50000 | 77.5 | 82.7 | 85.0 | 85.9 | 85.2 | 84.4 | 82.9 | 81.6 | 87.7 | 82.9 | 81.6 | 80.9 | 145.8 |
| 12500 | 63000 | 69.9 | 77.1 | 77.7 | 78.3 | 76.5 | 75.9 | 76.9 | 75.0 | 81.3 | 77.6 | 77.7 | 73.3 | 144.2 |
| 16000 | 80000 | 63.1 | 69.9 | 69.7 | 70.5 | 70.0 | 69.9 | 68.7 | 68.0 | 71.5 | 67.7 | 67.9 | 63.5 | 142.6 |

OASPL 105.3 113.1 113.3 111.0 112.5 112.7 112.2 114.3 118.6 122.4 123.3 121.2 120.1 161.1

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000
FREE JET VELOCITY (FT/SEC) 385.00
FREE JET DIAMETER (IN) 48.00
REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

TEST DATE 03-16-78
LOCATION C41 ANECH CH
TAPE NO. N310
AERG. RDG. ADH176
ALPHA 3859
PAMS 29.4500
TAMS 39.92
RELHUM 35.20

MODEL TEST POINT 0300
ACUSTIC RANGE 12.2 M (40.0 FT) ARC
139.0 SQ CM (21.55 SQ IN) - MODEL 117.35 M/SEC (385.0 FPS)
FREE-JET SPEED

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FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FWMDL X03095

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 50.1 | 72.5 | 72.9 | 71.7 | 72.4 | 72.7 | 72.6 | 73.8 | 79.3 | 87.7 | 90.4 | 88.8 | 81.8 | 164.3 |
| 63 | 49.6 | 73.3 | 73.9 | 72.2 | 73.3 | 73.6 | 74.2 | 75.5 | 81.7 | 88.4 | 91.0 | 88.3 | 79.9 | 164.4 |
| 80 | 49.9 | 73.9 | 75.4 | 74.1 | 75.7 | 75.2 | 75.7 | 76.7 | 83.6 | 89.5 | 91.0 | 87.7 | 79.5 | 164.7 |
| 100 | 56.7 | 75.2 | 76.2 | 75.0 | 76.3 | 76.6 | 76.7 | 78.5 | 85.4 | 89.9 | 90.4 | 86.1 | 80.1 | 164.6 |
| 125 | 61.9 | 75.2 | 77.5 | 76.6 | 77.4 | 78.2 | 78.3 | 80.1 | 85.7 | 90.3 | 90.4 | 84.3 | 78.7 | 164.6 |
| 160 | 64.6 | 79.0 | 79.0 | 76.3 | 78.8 | 79.1 | 78.7 | 81.1 | 86.9 | 89.7 | 89.8 | 82.6 | 77.4 | 164.4 |
| 200 | 65.4 | 79.0 | 80.4 | 78.5 | 79.5 | 80.3 | 80.1 | 81.5 | 87.3 | 89.9 | 88.7 | 81.7 | 77.6 | 164.6 |
| 250 | 68.4 | 78.3 | 79.2 | 78.6 | 78.3 | 79.2 | 80.2 | 82.2 | 87.2 | 90.8 | 89.6 | 82.8 | 78.5 | 165.5 |
| 315 | 68.0 | 79.3 | 79.1 | 78.3 | 79.9 | 80.1 | 81.0 | 83.2 | 88.5 | 90.7 | 90.2 | 84.0 | 78.8 | 166.5 |
| 400 | 69.2 | 79.1 | 80.3 | 79.4 | 80.0 | 81.3 | 81.7 | 84.4 | 88.3 | 90.5 | 89.1 | 82.4 | 78.5 | 166.6 |
| 500 | 72.7 | 81.4 | 80.2 | 79.6 | 79.5 | 80.9 | 81.6 | 84.1 | 88.1 | 90.3 | 87.9 | 80.6 | 76.3 | 166.5 |
| 630 | 71.2 | 79.8 | 82.3 | 80.1 | 82.7 | 82.3 | 82.3 | 84.9 | 87.6 | 89.4 | 85.4 | 78.3 | 74.2 | 166.3 |
| 800 | 65.8 | 79.0 | 81.6 | 82.7 | 83.7 | 83.7 | 82.5 | 84.0 | 86.8 | 87.1 | 84.0 | 78.6 | 72.3 | 168.8 |
| 1000 | 70.1 | 79.7 | 81.9 | 82.6 | 83.2 | 82.6 | 83.3 | 85.4 | 86.7 | 81.7 | 75.8 | 71.4 | 165.8 | |
| 1250 | 71.5 | 80.3 | 81.5 | 81.4 | 82.6 | 83.4 | 82.2 | 83.3 | 84.0 | 84.3 | 80.2 | 74.1 | 69.6 | 165.7 |
| 1600 | 69.4 | 79.3 | 81.3 | 80.8 | 81.7 | 81.6 | 81.1 | 81.3 | 82.7 | 83.7 | 77.8 | 72.8 | 67.6 | 166.0 |
| 2000 | 66.3 | 77.1 | 80.2 | 79.8 | 82.1 | 82.1 | 80.1 | 81.3 | 81.9 | 80.7 | 75.6 | 70.0 | 63.5 | 166.8 |
| 2500 | 63.5 | 74.7 | 78.1 | 79.1 | 81.3 | 80.6 | 77.7 | 78.6 | 77.0 | 73.2 | 67.7 | 61.6 | 55.2 | 165.9 |
| 3150 | 54.4 | 69.8 | 73.0 | 74.4 | 77.1 | 76.8 | 72.8 | 70.4 | 74.9 | 72.3 | 63.1 | 55.3 | 45.1 | 166.0 |
| 4000 | 46.7 | 61.0 | 65.3 | 66.4 | 69.1 | 68.3 | 67.2 | 66.0 | 67.2 | 63.5 | 55.1 | 42.1 | 26.8 | 165.1 |
| 5000 | 34.2 | 48.5 | 55.2 | 59.7 | 62.2 | 62.2 | 67.4 | 66.4 | 66.3 | 48.9 | 39.0 | 23.1 | | 165.4 |
| 6300 | 11.0 | 28.2 | 38.8 | 43.1 | 44.9 | 44.9 | 42.6 | 38.8 | 40.5 | 28.4 | 15.1 | | | 163.9 |
| 8000 | | | | | | | | | | | | | | 162.3 |
| 10000 | | | | | | | | | | | | | | 160.9 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

GASPL 80.4 90.6 92.3 91.6 92.9 93.3 92.6 94.5 96.4 101.2 100.7 95.9 89.6 179.1

PWL 87.9 98.9 101.3 101.4 103.2 103.1 101.6 102.8 105.1 106.4 104.4 98.2 92.9

PWLT 89.1 96.9 101.9 102.5 104.3 104.3 102.1 102.8 105.7 106.4 104.4 96.2 92.9

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-16-78 TAPE NO. N310 ALPHA 9859 TAMB 39.92
 LOCATION C41 ANECH CH AERG. RDG. ADH176 PAMB 29.4500 RELHUM 35.20

MODEL TEST POINT 0309 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.35 M/SEC (385.0 FPS) FREE-JET SPEED

ORIGINAL PAGE IS
OF POOR QUALITY

07/19/79 17.289

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X03100

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PHL |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | | | | | | | | | | | | | | |
| 315 | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | | |
| 630 | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | |
| 1000 | | | | | | | | | | | | | | |
| 1250 | | | | | | | | | | | | | | |
| 1600 | | | | | | | | | | | | | | |
| 2000 | | | | | | | | | | | | | | |
| 2500 | | | | | | | | | | | | | | |
| 3150 | | | | | | | | | | | | | | |
| 4000 | | | | | | | | | | | | | | |
| 5000 | | | | | | | | | | | | | | |
| 6300 | | | | | | | | | | | | | | |
| 8000 | | | | | | | | | | | | | | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |
| OASPL | 94.8 | 105.5 | 107.0 | 106.7 | 108.1 | 109.7 | 110.6 | 114.1 | 117.3 | 121.9 | 123.8 | 124.7 | 122.8 | 160.2 |

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000

FREE JET VELOCITY (FT/SEC) 0.

REFRACTION CORRECTION - YES

TURBULANCE CORRECTION - YES

TEST DATE 03-16-78

LOCATION C41 ANECH CH

TAPE NO. N310

AERO. RDG. ADH173

ALPHA 3859

PAMB 29.4600

YAPB 37.40

RELHUM 46.30

MODEL TEST POINT 0310

ACUSTIC RANGE 12.2 M (40.0 FT) ARC

SIZE 139.0 SQ CM (21.65 SQ IN) - MODEL

FREE-JET SPEED 0. M/SEC (0. FPS)

07/19/79 17.289

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FM0DL X03105

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 44.8 | 67.4 | 69.7 | 69.5 | 71.8 | 74.0 | 75.2 | 77.0 | 80.5 | 86.2 | 89.8 | 89.1 | 83.9 | 164.6 |
| 63 | 47.4 | 68.2 | 71.6 | 71.3 | 73.3 | 75.1 | 76.1 | 78.6 | 82.1 | 89.3 | 90.9 | 89.9 | 84.4 | 165.5 |
| 80 | 50.2 | 69.5 | 71.9 | 72.4 | 77.4 | 76.9 | 77.6 | 80.6 | 83.6 | 89.6 | 91.4 | 90.1 | 84.9 | 166.1 |
| 100 | 54.9 | 69.7 | 72.8 | 74.3 | 75.9 | 77.4 | 78.9 | 82.1 | 85.6 | 90.3 | 90.9 | 89.8 | 85.0 | 166.2 |
| 125 | 59.1 | 73.0 | 75.8 | 75.6 | 76.4 | 78.9 | 80.1 | 82.9 | 86.8 | 90.1 | 89.4 | 88.7 | 84.6 | 165.8 |
| 160 | 60.0 | 77.4 | 79.8 | 79.1 | 79.8 | 82.3 | 82.1 | 85.1 | 88.8 | 95.5 | 96.0 | 94.3 | 86.1 | 171.2 |
| 200 | 60.3 | 71.6 | 73.0 | 75.5 | 77.6 | 79.8 | 81.1 | 84.3 | 87.5 | 89.7 | 89.0 | 88.3 | 84.0 | 166.1 |
| 250 | 62.2 | 73.4 | 75.4 | 75.7 | 77.2 | 78.7 | 80.9 | 84.2 | 87.4 | 89.0 | 87.5 | 87.7 | 82.0 | 165.6 |
| 315 | 61.9 | 73.2 | 75.7 | 76.1 | 77.6 | 79.4 | 81.1 | 84.1 | 86.7 | 90.1 | 89.0 | 86.8 | 79.6 | 166.2 |
| 400 | 62.7 | 73.4 | 75.2 | 76.0 | 77.6 | 79.4 | 80.8 | 84.3 | 86.7 | 87.5 | 87.8 | 84.7 | 76.9 | 165.2 |
| 500 | 62.6 | 71.9 | 74.8 | 74.7 | 76.5 | 79.0 | 80.2 | 83.7 | 85.6 | 86.4 | 87.0 | 82.0 | 74.9 | 164.5 |
| 630 | 61.4 | 72.1 | 74.2 | 75.1 | 76.7 | 78.5 | 80.2 | 83.9 | 84.7 | 86.0 | 85.5 | 80.5 | 72.2 | 164.2 |
| 800 | 59.6 | 71.4 | 74.4 | 74.6 | 76.6 | 79.1 | 79.8 | 82.6 | 83.6 | 84.6 | 83.4 | 78.8 | 70.9 | 163.5 |
| 1000 | 57.7 | 71.3 | 74.0 | 75.0 | 76.4 | 77.7 | 79.1 | 81.6 | 82.9 | 83.3 | 81.6 | 77.2 | 68.7 | 163.0 |
| 1250 | 55.6 | 69.1 | 74.2 | 74.0 | 76.2 | 78.3 | 77.5 | 81.0 | 81.5 | 82.0 | 79.3 | 74.9 | 66.1 | 162.5 |
| 1600 | 51.5 | 66.6 | 71.1 | 73.3 | 75.4 | 76.5 | 76.2 | 78.8 | 78.5 | 78.7 | 76.2 | 71.2 | 62.3 | 161.2 |
| 2000 | 48.8 | 64.2 | 69.3 | 71.8 | 75.1 | 76.8 | 74.6 | 76.8 | 76.9 | 76.9 | 72.6 | 67.5 | 57.1 | 161.1 |
| 2500 | 41.9 | 60.6 | 65.8 | 68.3 | 72.4 | 74.0 | 71.4 | 73.2 | 73.0 | 72.0 | 67.9 | 62.2 | 49.6 | 160.0 |
| 3150 | 37.4 | 55.2 | 60.9 | 63.7 | 69.0 | 69.9 | 66.9 | 66.7 | 68.3 | 65.3 | 60.9 | 53.5 | 39.0 | 159.0 |
| 4000 | 29.3 | 45.9 | 54.7 | 59.0 | 61.1 | 61.7 | 60.5 | 61.0 | 61.0 | 58.9 | 52.0 | 40.0 | 19.1 | 158.8 |
| 5000 | 15.4 | 33.2 | 43.5 | 48.2 | 54.1 | 54.9 | 50.4 | 50.0 | 49.7 | 46.2 | 37.3 | 21.6 | | 158.4 |
| 6300 | | | | | | 31.3 | 36.1 | 37.9 | 35.8 | 32.7 | 25.5 | 13.6 | | 155.6 |
| 8000 | | | | | | | | | | | | | | 155.8 |
| 10000 | | | | | | | | | | | | | | 156.7 |

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OASPL 71.4 84.2 86.9 67.3 89.1 90.9 91.8 94.8 97.4 101.2 101.4 99.9 94.3 178.1
PNL 76.1 89.1 92.8 94.4 97.1 98.7 98.2 100.7 102.7 105.2 104.7 102.2 95.5
PNLT 76.1 90.0 93.5 95.0 98.3 99.8 98.7 100.7 103.2 106.1 105.6 103.2 96.5

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-18-78 TAPE NO. N310 IALPHA S859 TAMB 37.40
LOCATION C41 ANECH CH AERO. RDG. ADH173 PAMB 29.4800 RELHUM 46.30

MODEL TEST POINT 0310 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 0. FREE-JET SPEED 0. M/SEC (0. FPS)

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FHDDL X03110
BACKGROUND FJB300-FHDDL X01300

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | | | | | | | | | | | | | | |
| 315 | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | | |
| 630 | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | |
| 1000 | | | | | | | | | | | | | | |
| 1250 | | | | | | | | | | | | | | |
| 1600 | | | | | | | | | | | | | | |
| 2000 | | | | | | | | | | | | | | |
| 2500 | | | | | | | | | | | | | | |
| 3150 | | | | | | | | | | | | | | |
| 4000 | | | | | | | | | | | | | | |
| 5000 | | | | | | | | | | | | | | |
| 6300 | | | | | | | | | | | | | | |
| 8000 | | | | | | | | | | | | | | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |
| GASPL | 94.6 | 102.7 | 104.2 | 104.6 | 105.9 | 107.4 | 108.3 | 111.6 | 114.9 | 120.2 | 121.5 | 117.1 | 112.3 | 155.5 |

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| TEST DATE | 03-16-78 | TAPE NO. | N310 | ALPHA | SB59 | TAMB | 38.12 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH187 | PAMB | 29.4850 | RELHUM | 33.40 |

| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
|-------|------------|-----------------------|------------------------------------|--------------------------|
| 0300 | 0311 | 12.2 M (40.0 FT) ARC | 139.0 SQ CM (21.55 SQ IN) - MODEL | 86.09 M/SEC (289.0 FPS) |

07/19/79 17.289

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X03110

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 69.4 | 67.6 | 66.6 | 66.0 | 65.4 | 65.6 | 66.5 | 67.4 | 68.3 | 69.2 | 70.1 | 71.0 | 71.9 | 72.8 |
| 315 | 69.4 | 67.6 | 66.6 | 66.0 | 65.4 | 65.6 | 66.5 | 67.4 | 68.3 | 69.2 | 70.1 | 71.0 | 71.9 | 72.8 |
| 400 | 69.3 | 68.2 | 67.6 | 67.0 | 66.4 | 66.6 | 67.5 | 68.4 | 69.3 | 70.2 | 71.1 | 72.0 | 72.9 | 73.8 |
| 500 | 69.6 | 68.6 | 68.0 | 67.4 | 66.8 | 67.0 | 67.9 | 68.8 | 69.7 | 70.6 | 71.5 | 72.4 | 73.3 | 74.2 |
| 630 | 72.1 | 70.5 | 69.4 | 68.8 | 68.2 | 68.4 | 69.3 | 70.2 | 71.1 | 72.0 | 72.9 | 73.8 | 74.7 | 75.6 |
| 800 | 75.1 | 73.5 | 72.4 | 71.8 | 71.2 | 71.4 | 72.3 | 73.2 | 74.1 | 75.0 | 75.9 | 76.8 | 77.7 | 78.6 |
| 1000 | 78.8 | 77.2 | 76.1 | 75.5 | 74.9 | 75.1 | 76.0 | 76.9 | 77.8 | 78.7 | 79.6 | 80.5 | 81.4 | 82.3 |
| 1250 | 82.5 | 80.9 | 79.8 | 79.2 | 78.6 | 78.8 | 79.7 | 80.6 | 81.5 | 82.4 | 83.3 | 84.2 | 85.1 | 86.0 |
| 1600 | 88.1 | 86.5 | 85.4 | 84.8 | 84.2 | 84.4 | 85.3 | 86.2 | 87.1 | 88.0 | 88.9 | 89.8 | 90.7 | 91.6 |
| 2000 | 86.2 | 84.6 | 83.5 | 82.9 | 82.3 | 82.5 | 83.4 | 84.3 | 85.2 | 86.1 | 87.0 | 87.9 | 88.8 | 89.7 |
| 2500 | 86.1 | 84.5 | 83.4 | 82.8 | 82.2 | 82.4 | 83.3 | 84.2 | 85.1 | 86.0 | 86.9 | 87.8 | 88.7 | 89.6 |
| 3150 | 89.6 | 88.0 | 86.9 | 86.3 | 85.7 | 85.9 | 86.8 | 87.7 | 88.6 | 89.5 | 90.4 | 91.3 | 92.2 | 93.1 |
| 4000 | 87.7 | 86.1 | 85.0 | 84.4 | 83.8 | 84.0 | 84.9 | 85.8 | 86.7 | 87.6 | 88.5 | 89.4 | 90.3 | 91.2 |
| 5000 | 90.3 | 88.7 | 87.6 | 87.0 | 86.4 | 86.6 | 87.5 | 88.4 | 89.3 | 90.2 | 91.1 | 92.0 | 92.9 | 93.8 |
| 6300 | 90.1 | 88.5 | 87.4 | 86.8 | 86.2 | 86.4 | 87.3 | 88.2 | 89.1 | 90.0 | 90.9 | 91.8 | 92.7 | 93.6 |
| 8000 | 90.9 | 89.3 | 88.2 | 87.6 | 87.0 | 87.2 | 88.1 | 89.0 | 89.9 | 90.8 | 91.7 | 92.6 | 93.5 | 94.4 |
| 10000 | 91.4 | 89.8 | 88.7 | 88.1 | 87.5 | 87.7 | 88.6 | 89.5 | 90.4 | 91.3 | 92.2 | 93.1 | 94.0 | 94.9 |
| 12500 | 90.2 | 88.6 | 87.5 | 86.9 | 86.3 | 86.5 | 87.4 | 88.3 | 89.2 | 90.1 | 91.0 | 91.9 | 92.8 | 93.7 |
| 16000 | 87.9 | 86.3 | 85.2 | 84.6 | 84.0 | 84.2 | 85.1 | 86.0 | 86.9 | 87.8 | 88.7 | 89.6 | 90.5 | 91.4 |
| 20000 | 85.1 | 83.5 | 82.4 | 81.8 | 81.2 | 81.4 | 82.3 | 83.2 | 84.1 | 85.0 | 85.9 | 86.8 | 87.7 | 88.6 |
| 25000 | 80.5 | 78.9 | 77.8 | 77.2 | 76.6 | 76.8 | 77.7 | 78.6 | 79.5 | 80.4 | 81.3 | 82.2 | 83.1 | 84.0 |
| 31500 | 78.6 | 77.0 | 75.9 | 75.3 | 74.7 | 74.9 | 75.8 | 76.7 | 77.6 | 78.5 | 79.4 | 80.3 | 81.2 | 82.1 |
| 40000 | 76.1 | 74.5 | 73.4 | 72.8 | 72.2 | 72.4 | 73.3 | 74.2 | 75.1 | 76.0 | 76.9 | 77.8 | 78.7 | 79.6 |
| 50000 | 71.0 | 69.4 | 68.3 | 67.7 | 67.1 | 67.3 | 68.2 | 69.1 | 70.0 | 70.9 | 71.8 | 72.7 | 73.6 | 74.5 |
| 63000 | 63.1 | 61.5 | 60.4 | 59.8 | 59.2 | 59.4 | 60.3 | 61.2 | 62.1 | 63.0 | 63.9 | 64.8 | 65.7 | 66.6 |
| 80000 | 55.8 | 54.2 | 53.1 | 52.5 | 51.9 | 52.1 | 53.0 | 53.9 | 54.8 | 55.7 | 56.6 | 57.5 | 58.4 | 59.3 |
| QASPL | 100.0 | 107.6 | 108.5 | 108.4 | 108.6 | 109.0 | 108.7 | 111.0 | 114.6 | 119.1 | 120.3 | 116.5 | 113.6 | 156.8 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 289.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 46.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 03-16-78 | TAPE NO. | N310 | ALPHA | 3859 | TAMB | 38.12 |
|-----------|--------------|------------|-------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH07 | PAMB | 29.4850 | RELHUM | 33.40 |

| MODEL | TEST POINT | ACOUSTIC RANGE | ARC | 139.0 SQ CM (21.56 SQ IN) | MODEL | FREE-JET SPEED |
|-------|------------|-------------------|-----|----------------------------|--------------------------|----------------|
| 0300 | Q011 | 12.2 M (40.0 FT) | ARC | SIZE | 88.09 M/SEC (289.0 FPS) | |

07/19/79 17.200

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X03115

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 48.6 | 68.4 | 69.9 | 69.6 | 70.6 | 70.9 | 71.4 | 72.1 | 76.9 | 84.8 | 86.9 | 84.6 | 77.0 | 160.7 |
| 63 | 48.3 | 70.0 | 70.9 | 71.7 | 72.0 | 72.5 | 73.4 | 73.4 | 79.2 | 85.1 | 87.1 | 83.8 | 75.4 | 160.6 |
| 80 | 50.7 | 70.6 | 72.8 | 72.4 | 73.3 | 73.8 | 73.8 | 75.4 | 81.3 | 85.4 | 85.9 | 81.6 | 71.8 | 160.0 |
| 100 | 53.6 | 71.6 | 73.1 | 73.9 | 74.2 | 75.1 | 75.0 | 77.3 | 82.3 | 86.1 | 84.7 | 78.5 | 70.0 | 159.7 |
| 125 | 56.2 | 71.3 | 74.0 | 74.2 | 74.2 | 75.7 | 76.1 | 78.0 | 86.7 | 93.5 | 94.5 | 82.3 | 75.0 | 157.2 |
| 160 | 60.7 | 72.0 | 75.5 | 83.0 | 82.3 | 82.5 | 82.4 | 83.4 | 83.6 | 85.9 | 84.5 | 75.5 | 68.4 | 161.6 |
| 200 | 66.1 | 79.9 | 82.0 | 76.1 | 76.9 | 77.7 | 77.6 | 80.0 | 83.9 | 86.0 | 83.0 | 74.2 | 68.2 | 160.6 |
| 250 | 63.8 | 73.5 | 75.9 | 75.3 | 75.9 | 76.9 | 77.3 | 79.8 | 84.8 | 88.4 | 85.4 | 76.0 | 70.3 | 162.1 |
| 315 | 63.4 | 73.1 | 75.8 | 76.0 | 76.8 | 77.5 | 78.4 | 80.4 | 84.1 | 85.2 | 82.8 | 75.1 | 67.6 | 160.7 |
| 400 | 66.4 | 73.5 | 74.7 | 75.6 | 76.5 | 77.5 | 78.2 | 80.6 | 82.8 | 84.4 | 82.4 | 74.5 | 67.7 | 160.8 |
| 500 | 63.9 | 73.0 | 74.0 | 75.4 | 76.6 | 77.4 | 77.9 | 80.3 | 82.7 | 84.5 | 81.4 | 74.5 | 67.9 | 160.8 |
| 630 | 65.0 | 72.5 | 74.5 | 75.6 | 76.3 | 78.0 | 78.1 | 80.4 | 82.2 | 83.2 | 81.1 | 74.0 | 67.0 | 160.9 |
| 800 | 65.4 | 73.1 | 75.2 | 76.0 | 76.7 | 78.3 | 78.0 | 80.0 | 81.6 | 81.9 | 79.9 | 72.0 | 65.2 | 160.6 |
| 1000 | 65.7 | 74.2 | 75.7 | 75.9 | 77.1 | 78.1 | 77.7 | 79.8 | 80.7 | 81.4 | 77.9 | 71.2 | 63.5 | 160.6 |
| 1250 | 65.8 | 74.8 | 75.4 | 77.2 | 78.0 | 79.0 | 78.9 | 78.8 | 78.7 | 78.9 | 75.9 | 69.9 | 62.9 | 160.7 |
| 1600 | 63.6 | 73.1 | 75.8 | 77.3 | 78.0 | 77.4 | 76.9 | 77.3 | 77.6 | 78.0 | 73.6 | 68.2 | 60.5 | 161.0 |
| 2000 | 60.4 | 71.2 | 74.8 | 75.7 | 77.3 | 77.6 | 74.9 | 75.9 | 75.2 | 74.7 | 69.8 | 65.4 | 55.9 | 161.0 |
| 2500 | 55.8 | 67.5 | 71.7 | 72.1 | 75.2 | 74.8 | 71.5 | 72.2 | 72.9 | 69.5 | 65.3 | 59.1 | 49.9 | 160.3 |
| 3150 | 47.9 | 62.4 | 66.2 | 67.4 | 71.5 | 70.7 | 67.8 | 66.4 | 68.7 | 65.9 | 60.1 | 50.3 | 38.3 | 160.0 |
| 4000 | 39.7 | 54.4 | 59.0 | 62.9 | 63.3 | 62.7 | 61.2 | 60.8 | 61.6 | 57.0 | 50.7 | 37.2 | 20.9 | 159.5 |
| 5000 | 27.4 | 41.9 | 49.2 | 52.3 | 56.0 | 56.6 | 51.7 | 51.2 | 50.1 | 42.7 | 34.5 | 18.4 | | 159.3 |
| 6300 | 4.5 | 21.5 | 32.2 | 35.1 | 38.5 | 39.0 | 36.5 | 33.1 | 34.2 | 22.1 | 10.5 | | | 157.6 |
| 8000 | | | 2.3 | 9.8 | 12.9 | 13.5 | 13.0 | 7.6 | 6.7 | | | | | 156.3 |
| 10000 | | | | | | | | | | | | | | 155.8 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|-------|------|------|-------|-------|-------|------|------|-------|
| OASPL | 75.5 | 65.9 | 66.0 | 66.6 | 69.4 | 90.0 | 69.7 | 91.5 | 94.7 | 96.3 | 97.9 | 90.8 | 83.0 | 174.7 |
| PWL | 82.5 | 93.1 | 90.0 | 96.9 | 98.3 | 98.7 | 97.2 | 98.5 | 100.1 | 102.4 | 101.2 | 92.2 | 84.0 | |
| PNLT | 83.6 | 94.3 | 97.1 | 98.2 | 99.6 | 100.0 | 98.1 | 99.3 | 100.8 | 103.6 | 102.8 | 93.1 | 85.0 | |

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-18-78 TAPE NO. N310 ALPHA 3859 TAMP 38.12
 LOCATION C41 ANECH CH AERO. RDG. ADH187 PAMB 29.4850 RELNUM 33.40

MODEL TEST POINT 0311 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 88.09 M/SEC (289.0 FPS) FREE-JET SPEED

07/19/79 17.289

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FM0DL X03120
BACKGROUND FJB400-FM0DL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

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TEST DATE 03-16-78 TAPE NO. N310 ALPHA SB59 TAMB 40.82
LOCATION C41 ANECH CH AERO, RDG. ADH178 PAMB 29.4500 RELHUM 32.90

MODEL TEST POINT 0312 ACQUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 117.35 M/SEC (395.0 FPS) FREE-JET SPEED

07/19/79 17.289

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODEL X03120

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 69.7 | 69.7 | 67.2 | 66.7 | 65.5 | 65.0 | 65.4 | 66.0 | 61.7 | 97.7 | 101.3 | 104.4 | 102.0 | 137.6 |
| 315 | 69.7 | 68.7 | 67.2 | 66.7 | 67.6 | 37.2 | 67.0 | 67.5 | 93.3 | 102.7 | 105.6 | 106.6 | 102.9 | 140.6 |
| 400 | 70.5 | 69.9 | 68.3 | 67.4 | 68.5 | 68.3 | 68.0 | 69.5 | 94.5 | 103.8 | 105.4 | 105.4 | 98.8 | 140.5 |
| 500 | 70.2 | 91.4 | 90.8 | 88.9 | 89.7 | 89.5 | 89.0 | 90.1 | 96.6 | 103.9 | 106.6 | 104.3 | 98.2 | 140.7 |
| 630 | 70.5 | 91.7 | 91.5 | 89.9 | 94.1 | 90.7 | 90.6 | 92.3 | 99.1 | 104.7 | 106.3 | 101.4 | 98.1 | 140.8 |
| 800 | 70.5 | 92.9 | 93.0 | 91.1 | 91.5 | 91.8 | 91.7 | 93.8 | 100.6 | 105.5 | 104.7 | 99.1 | 97.9 | 140.6 |
| 1000 | 78.9 | 92.4 | 93.6 | 92.7 | 92.9 | 93.3 | 93.2 | 95.5 | 105.2 | 113.5 | 113.0 | 104.9 | 105.0 | 147.7 |
| 1250 | 83.3 | 93.6 | 94.8 | 92.8 | 99.9 | 99.1 | 99.3 | 100.8 | 102.0 | 105.5 | 105.0 | 98.9 | 98.4 | 142.5 |
| 1600 | 90.3 | 102.7 | 101.0 | 101.0 | 94.5 | 95.2 | 95.1 | 97.7 | 102.9 | 105.6 | 103.2 | 97.9 | 98.4 | 142.7 |
| 2000 | 87.2 | 95.9 | 95.7 | 94.3 | 94.0 | 94.3 | 94.7 | 98.1 | 104.0 | 108.7 | 105.5 | 99.9 | 100.2 | 143.3 |
| 2500 | 86.9 | 95.3 | 95.9 | 94.3 | 95.7 | 95.5 | 96.7 | 98.8 | 103.8 | 105.3 | 103.9 | 100.1 | 98.8 | 142.0 |
| 3150 | 90.2 | 97.0 | 97.7 | 96.1 | 95.8 | 96.2 | 96.7 | 99.6 | 103.4 | 105.7 | 103.7 | 99.5 | 98.9 | 142.3 |
| 4000 | 90.2 | 96.9 | 96.1 | 95.9 | 96.1 | 96.6 | 97.1 | 99.6 | 103.2 | 105.4 | 103.0 | 99.8 | 99.2 | 142.2 |
| 5000 | 91.6 | 97.7 | 97.5 | 96.3 | 97.1 | 97.7 | 97.6 | 100.2 | 103.1 | 104.5 | 102.5 | 99.7 | 101.3 | 142.4 |
| 6300 | 93.0 | 99.0 | 98.6 | 97.1 | 96.5 | 98.1 | 98.1 | 99.6 | 102.5 | 104.1 | 101.8 | 100.2 | 101.7 | 142.6 |
| 8000 | 91.8 | 97.9 | 97.3 | 95.8 | 97.1 | 97.7 | 97.0 | 99.5 | 101.7 | 103.4 | 101.8 | 100.6 | 102.1 | 142.5 |
| 10000 | 93.0 | 99.3 | 97.8 | 96.5 | 97.7 | 98.3 | 96.8 | 98.6 | 100.3 | 102.1 | 100.3 | 99.8 | 101.5 | 142.6 |
| 12500 | 92.0 | 99.4 | 99.4 | 97.0 | 98.6 | 97.7 | 96.2 | 97.6 | 100.1 | 102.0 | 98.8 | 99.8 | 101.4 | 143.3 |
| 16000 | 90.1 | 98.5 | 99.0 | 98.5 | 98.9 | 98.4 | 95.0 | 97.1 | 98.2 | 98.6 | 95.9 | 96.9 | 98.9 | 143.5 |
| 20000 | 88.0 | 95.3 | 96.3 | 96.3 | 96.4 | 96.2 | 92.8 | 93.9 | 94.1 | 92.3 | 90.7 | 91.9 | 96.4 | 142.2 |
| 25000 | 82.7 | 93.1 | 92.5 | 92.8 | 94.3 | 93.4 | 89.0 | 87.4 | 94.1 | 94.3 | 91.6 | 90.9 | 94.7 | 142.4 |
| 31500 | 80.8 | 89.4 | 89.6 | 88.4 | 89.6 | 88.0 | 87.0 | 87.6 | 87.9 | 86.7 | 85.3 | 83.7 | 89.3 | 141.1 |
| 40000 | 78.3 | 84.2 | 86.0 | 86.6 | 87.8 | 87.0 | 80.8 | 81.3 | 83.0 | 79.9 | 79.1 | 78.8 | 83.1 | 141.4 |
| 50000 | 72.9 | 78.1 | 80.6 | 81.0 | 79.7 | 79.9 | 76.3 | 74.4 | 79.0 | 73.7 | 73.5 | 73.4 | 78.1 | 139.6 |
| 63000 | 65.9 | 72.6 | 72.6 | 73.7 | 71.7 | 71.1 | 70.4 | 67.8 | 75.7 | 70.7 | 70.7 | 68.8 | 73.5 | 138.7 |
| 80000 | 59.1 | 65.6 | 64.8 | 65.9 | 64.9 | 65.8 | 63.7 | 63.4 | 65.9 | 60.9 | 60.9 | 60.9 | 63.7 | 137.8 |
| 0ASPL | 101.8 | 109.9 | 109.6 | 108.5 | 109.0 | 109.0 | 106.4 | 110.5 | 114.4 | 118.7 | 118.1 | 114.7 | 113.6 | 156.3 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 385.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 03-16-78 | TAPE NO. | N310 | 1ALPHA | SB59 | TAMB | 40.82 |
|-----------|--------------|------------|--------|--------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH178 | PAMB | 29.4500 | RELHUM | 32.90 |

| MODEL | TEST POINT | ACQUSTIC RANGE | 12.2 M (40.0 FT) ARC | 139.0 SQ CM (21.56 SQ IN) - MODEL | 117.35 M/SEC (385.0 FPS) |
|-------|------------|----------------|-----------------------|------------------------------------|---------------------------|
| 0300 | 0312 | | | | |

07/19/79 17.289

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X03126

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PNL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 49.2 | 70.2 | 70.6 | 69.4 | 70.9 | 70.9 | 70.5 | 71.5 | 75.7 | 84.0 | 85.1 | 81.9 | 71.9 | 158.7 |
| 63 | 48.9 | 71.8 | 72.1 | 70.9 | 72.1 | 72.0 | 71.4 | 72.1 | 78.1 | 84.1 | 85.3 | 80.7 | 71.3 | 158.8 |
| 80 | 49.1 | 71.9 | 72.7 | 71.8 | 76.5 | 73.2 | 73.0 | 74.2 | 80.4 | 84.9 | 84.9 | 77.8 | 71.1 | 158.9 |
| 100 | 49.0 | 73.0 | 74.2 | 73.0 | 73.6 | 74.3 | 74.1 | 75.7 | 81.8 | 85.6 | 83.2 | 78.3 | 70.8 | 158.8 |
| 125 | 58.3 | 72.4 | 74.7 | 74.5 | 75.2 | 75.7 | 75.5 | 77.4 | 86.2 | 93.5 | 91.4 | 81.0 | 77.6 | 165.8 |
| 160 | 61.5 | 73.4 | 75.7 | 74.5 | 82.0 | 81.4 | 81.4 | 82.5 | 83.0 | 85.3 | 83.3 | 74.8 | 70.7 | 160.6 |
| 200 | 68.3 | 82.4 | 81.8 | 82.5 | 76.5 | 77.3 | 77.1 | 79.2 | 83.7 | 85.3 | 81.2 | 73.4 | 70.1 | 160.8 |
| 250 | 64.8 | 75.3 | 76.2 | 75.6 | 75.8 | 76.2 | 76.5 | 79.4 | 84.5 | 88.1 | 83.2 | 75.1 | 71.3 | 161.4 |
| 315 | 64.1 | 74.3 | 76.1 | 75.3 | 77.2 | 77.1 | 76.2 | 79.9 | 84.1 | 84.3 | 81.1 | 74.6 | 68.1 | 160.1 |
| 400 | 66.9 | 75.6 | 77.5 | 76.9 | 77.0 | 77.6 | 77.9 | 80.3 | 83.3 | 84.3 | 80.4 | 73.4 | 68.2 | 160.4 |
| 500 | 66.5 | 75.2 | 75.7 | 76.3 | 77.1 | 77.7 | 78.1 | 80.0 | 82.7 | 83.6 | 79.3 | 73.1 | 67.5 | 160.3 |
| 630 | 67.3 | 75.5 | 76.7 | 76.5 | 77.3 | 78.5 | 78.3 | 80.3 | 82.3 | 82.4 | 78.2 | 72.3 | 68.8 | 160.6 |
| 800 | 68.2 | 76.4 | 77.6 | 77.0 | 76.9 | 78.7 | 78.5 | 79.5 | 81.4 | 81.6 | 77.1 | 72.1 | 67.9 | 160.7 |
| 1000 | 66.7 | 75.0 | 76.0 | 75.5 | 77.3 | 78.2 | 77.2 | 79.2 | 80.4 | 80.5 | 75.6 | 71.6 | 67.1 | 160.6 |
| 1250 | 67.3 | 76.1 | 76.3 | 76.0 | 77.8 | 78.7 | 76.7 | 78.2 | 78.6 | 78.9 | 74.6 | 70.2 | 68.0 | 160.7 |
| 1600 | 65.4 | 75.6 | 77.4 | 76.2 | 78.5 | 77.8 | 78.1 | 78.8 | 78.1 | 78.2 | 72.2 | 68.9 | 62.8 | 161.4 |
| 2000 | 62.5 | 74.1 | 76.7 | 77.5 | 78.6 | 78.3 | 74.7 | 76.1 | 75.9 | 74.2 | 68.4 | 64.4 | 57.1 | 161.7 |
| 2500 | 58.7 | 69.7 | 73.0 | 74.6 | 75.5 | 75.6 | 72.0 | 72.2 | 70.9 | 66.7 | 61.4 | 56.5 | 49.6 | 160.4 |
| 3150 | 50.1 | 65.0 | 67.4 | 69.5 | 72.1 | 71.5 | 68.7 | 64.1 | 69.0 | 66.3 | 59.0 | 50.6 | 39.5 | 160.5 |
| 4000 | 41.9 | 56.7 | 60.7 | 61.8 | 64.3 | 64.0 | 61.7 | 61.1 | 59.0 | 54.0 | 46.4 | 34.4 | 19.6 | 159.2 |
| 5000 | 29.6 | 43.9 | 50.2 | 54.6 | 57.6 | 57.3 | 50.6 | 49.3 | 47.8 | 39.6 | 30.4 | 15.8 | | 159.6 |
| 6300 | 6.5 | 23.6 | 33.4 | 38.3 | 39.3 | 40.3 | 36.0 | 31.7 | 31.8 | 19.1 | 7.0 | | | 157.8 |
| 8000 | | | | | | | | | | | | | | 156.8 |
| 10000 | | | | | | | | | | | | | | 156.0 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

ORIGINAL PAGE 13
OF POOR QUALITY

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|-------|-------|------|------|-------|-------|-------|------|------|-------|
| GASPL | 77.2 | 88.0 | 88.9 | 88.6 | 89.8 | 89.9 | 89.3 | 91.0 | 94.4 | 97.9 | 95.6 | 88.6 | 82.8 | 174.3 |
| PNL | 84.2 | 95.5 | 97.5 | 97.9 | 99.1 | 99.1 | 98.9 | 98.2 | 100.0 | 101.9 | 98.7 | 90.9 | 85.7 | |
| PNLT | 85.4 | 96.6 | 98.4 | 99.1 | 100.4 | 100.2 | 97.8 | 98.9 | 100.7 | 103.3 | 100.1 | 92.0 | 88.8 | |

DIAMETER RATIO 4.061 FREQUENCY SHIFT -9

TEST DATE 03-16-78 TAPE NO. N310 ALPHA SB59 TAMB 40.82
 LOCATION C41 ANECH CH AERG. RDG. ADH178 PAMB 29.4500 RELHUM 32.90

MODEL TEST POINT 0312 ACOUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CH (1400.00 SQ IN) - FULL 117.35 M/SEC (385.0 FPS) FREE-JET SPEED

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X03130
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

FREQ
50
63
80

100

125

160

200

250 62.0 66.6 66.8 66.9 69.7 91.3 94.2 95.9 98.6 105.6 109.6 112.5 112.4 146.0
315 65.1 67.9 68.7 69.5 91.6 93.7 94.1 96.2 100.7 108.2 111.9 114.3 113.0 147.7
400 68.7 68.9 90.5 91.6 93.7 95.1 97.5 102.5 112.3 114.9 116.1 113.0 149.9
500 71.0 90.0 92.3 91.6 92.9 95.3 96.4 98.6 104.0 114.4 117.2 117.4 113.6 151.7
630 74.1 91.9 92.6 92.7 94.5 96.6 98.0 100.9 106.4 115.2 117.6 117.5 114.7 152.3
800 79.8 92.1 93.9 94.9 95.8 97.7 99.3 102.7 107.9 115.7 118.9 119.0 115.7 153.5
1000 86.2 96.5 99.2 97.8 97.4 99.0 100.4 104.0 109.0 116.3 118.7 118.9 115.5 153.6
1250 83.3 97.8 99.3 99.4 100.5 101.6 102.0 104.9 108.6 115.7 120.0 118.7 114.6 153.9
1500 86.6 95.2 96.7 97.3 98.9 100.7 102.1 105.6 110.0 115.3 119.5 117.5 113.5 153.4
2000 88.8 96.5 98.6 97.6 97.7 99.5 101.7 105.6 109.6 115.2 118.4 114.6 110.3 152.2
2500 87.2 96.5 93.2 98.0 98.8 100.5 102.1 106.0 109.7 115.8 117.3 113.2 108.2 151.8
3150 89.0 97.3 97.3 98.6 100.8 102.4 106.6 110.3 114.7 115.6 111.8 107.5 150.8
4000 88.9 96.5 97.2 97.0 98.0 100.1 101.8 106.5 109.5 114.1 114.3 110.2 106.2 150.0
5000 88.9 97.2 97.2 97.2 98.5 100.4 102.0 106.2 108.5 113.9 113.3 109.2 105.6 149.6
6300 87.3 97.2 98.5 97.9 98.7 101.0 102.2 105.9 108.1 112.7 111.6 108.1 105.3 148.9
8000 85.9 96.1 97.5 98.3 99.9 100.7 101.8 104.9 107.7 111.6 110.8 106.7 103.9 143.5
10000 83.8 94.1 97.0 98.0 100.3 101.9 100.8 104.4 106.3 110.5 109.2 106.0 103.0 148.0
12500 81.3 92.4 95.1 96.1 98.6 99.9 99.9 103.1 104.0 108.2 106.7 103.9 101.3 146.8
16000 78.8 90.3 94.1 95.6 98.2 99.4 98.4 101.1 102.2 106.5 104.7 102.8 100.7 146.6
20000 73.4 87.8 90.8 93.1 97.8 98.3 95.5 98.7 100.0 102.6 101.3 99.1 97.3 145.5
25000 71.4 84.5 87.5 88.7 94.3 95.1 93.0 93.5 97.1 97.6 98.1 95.1 94.2 144.2
31500 70.2 80.2 85.4 87.4 88.6 89.8 89.3 90.1 93.4 96.4 94.0 90.3 89.3 143.8
40000 65.3 74.8 80.1 82.0 86.6 87.3 83.7 85.5 88.1 91.1 89.0 85.3 84.7 143.2
50000 58.2 69.7 72.5 75.6 78.7 79.7 76.9 78.7 82.8 84.3 83.6 80.6 78.4 141.2
63000 52.4 64.7 66.3 69.3 70.5 71.4 73.0 72.2 76.7 78.4 77.6 74.9 73.9 140.7
80000 46.9 56.5 60.5 63.8 64.0 65.9 65.7 66.4 72.5 73.8 73.4 66.6 66.7 141.9

0ASPL 98.0 106.1 109.4 109.4 110.9 112.5 113.4 116.9 120.4 126.5 128.8 127.7 124.4 164.0

TEST DATE 03-16-78 TAPE NO. N310 ALPHA SB59 TAMB 37.04
LOCATION C41 ANECH CH AERO. RDG. ADH172 PAMB 29.4900 RELHUM 47.40

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (O. FPS)

0300

0313

ORIGINAL PAGE 13
OF POOR QUALITY

07/19/79 17.289

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X0313C

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PHL

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PHL |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 62.0 | 68.6 | 68.6 | 68.9 | 69.7 | 91.3 | 94.2 | 95.9 | 96.6 | 105.6 | 109.6 | 112.5 | 112.4 | 146.0 |
| 315 | 65.1 | 67.9 | 69.5 | 91.6 | 93.7 | 94.1 | 96.2 | 100.7 | 106.2 | 111.9 | 114.3 | 113.0 | 147.7 | |
| 400 | 68.7 | 69.9 | 90.5 | 91.6 | 93.7 | 95.1 | 97.5 | 102.5 | 112.3 | 114.9 | 116.1 | 113.0 | 149.9 | |
| 500 | 71.0 | 90.0 | 92.3 | 91.6 | 92.9 | 95.3 | 98.4 | 98.6 | 104.0 | 114.4 | 117.2 | 117.4 | 113.8 | 151.7 |
| 630 | 74.1 | 91.9 | 92.6 | 92.7 | 94.5 | 96.6 | 98.0 | 100.9 | 106.4 | 115.2 | 117.6 | 117.5 | 114.7 | 152.3 |
| 800 | 79.8 | 92.1 | 93.9 | 94.9 | 95.8 | 97.7 | 99.3 | 102.7 | 107.9 | 115.7 | 118.9 | 119.0 | 115.7 | 153.5 |
| 1000 | 86.2 | 98.5 | 99.2 | 97.8 | 97.4 | 99.0 | 100.4 | 104.0 | 109.0 | 116.3 | 118.7 | 118.9 | 115.5 | 153.6 |
| 1250 | 83.3 | 97.8 | 99.3 | 99.4 | 100.5 | 101.6 | 102.0 | 104.9 | 108.8 | 115.7 | 120.0 | 118.7 | 114.6 | 153.9 |
| 1600 | 86.6 | 95.2 | 96.7 | 97.3 | 98.9 | 100.7 | 102.1 | 105.8 | 110.0 | 115.3 | 119.5 | 117.5 | 113.5 | 153.4 |
| 2000 | 88.8 | 98.6 | 97.6 | 97.7 | 99.5 | 101.7 | 105.6 | 109.6 | 115.2 | 118.4 | 114.6 | 110.3 | 152.2 | |
| 2500 | 87.2 | 96.5 | 98.2 | 98.0 | 98.8 | 100.5 | 102.1 | 106.0 | 109.7 | 115.8 | 117.3 | 113.2 | 108.2 | 151.8 |
| 3150 | 89.0 | 97.3 | 97.6 | 97.3 | 98.6 | 100.6 | 102.4 | 106.6 | 110.3 | 114.7 | 115.6 | 111.8 | 107.5 | 150.8 |
| 4000 | 88.9 | 96.5 | 97.2 | 97.0 | 98.0 | 100.1 | 101.8 | 106.5 | 109.5 | 114.1 | 114.3 | 110.2 | 106.2 | 150.0 |
| 5000 | 88.9 | 97.2 | 97.2 | 97.2 | 98.5 | 100.4 | 102.0 | 106.2 | 108.5 | 113.9 | 113.3 | 109.2 | 105.6 | 149.8 |
| 6300 | 87.3 | 97.2 | 98.5 | 97.9 | 98.7 | 101.0 | 102.2 | 105.9 | 108.1 | 112.7 | 111.6 | 108.1 | 105.3 | 148.9 |
| 8000 | 85.9 | 96.1 | 97.5 | 98.3 | 99.9 | 100.7 | 101.6 | 104.9 | 107.7 | 111.6 | 110.8 | 106.7 | 103.9 | 148.5 |
| 10000 | 83.8 | 94.1 | 97.0 | 98.0 | 100.3 | 101.9 | 100.8 | 104.4 | 106.3 | 110.5 | 109.2 | 108.0 | 103.0 | 148.0 |
| 12500 | 81.3 | 92.4 | 95.1 | 96.1 | 98.6 | 99.9 | 99.9 | 103.1 | 104.0 | 108.2 | 106.7 | 103.9 | 101.3 | 146.8 |
| 16000 | 78.8 | 90.3 | 94.1 | 95.6 | 98.2 | 99.4 | 98.4 | 101.1 | 102.2 | 106.5 | 104.7 | 102.8 | 100.7 | 146.6 |
| 20000 | 73.4 | 87.8 | 90.8 | 93.1 | 97.8 | 98.3 | 95.5 | 98.7 | 100.0 | 102.6 | 101.3 | 99.1 | 97.3 | 145.5 |
| 25000 | 71.4 | 84.5 | 87.5 | 88.7 | 94.3 | 95.1 | 93.0 | 93.5 | 97.1 | 97.6 | 98.1 | 95.1 | 94.2 | 144.2 |
| 31500 | 70.2 | 80.2 | 85.4 | 87.4 | 88.6 | 89.8 | 89.3 | 90.1 | 93.4 | 96.4 | 94.0 | 90.3 | 89.3 | 143.8 |
| 40000 | 65.3 | 74.8 | 80.1 | 82.0 | 86.6 | 87.3 | 83.7 | 85.5 | 88.1 | 91.1 | 89.0 | 85.3 | 84.7 | 143.2 |
| 50000 | 58.2 | 69.7 | 72.5 | 75.6 | 78.7 | 79.7 | 78.9 | 78.7 | 82.8 | 84.3 | 83.6 | 80.6 | 78.4 | 141.2 |
| 63000 | 52.4 | 64.7 | 66.3 | 69.3 | 70.5 | 71.4 | 73.0 | 72.2 | 78.7 | 78.4 | 77.6 | 74.9 | 73.9 | 140.7 |
| 80000 | 46.9 | 56.5 | 60.5 | 63.8 | 64.0 | 65.9 | 65.7 | 66.4 | 72.5 | 73.8 | 73.4 | 66.6 | 68.7 | 141.9 |
| GASPL | 98.0 | 108.1 | 109.4 | 110.9 | 112.5 | 113.4 | 116.9 | 120.4 | 126.5 | 128.8 | 127.7 | 124.4 | 164.0 | |

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES TURBULANCE CORRECTION - YES

TEST DATE 03-16-78 TAPE NO. N310 ALPHA 3859 TAPB 37.04
LOCATION C41 ANECH CH AERO. RDG. ADH172 PABP 29.4900 RELHUM 47.40

MODEL TEST POINT 0313 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CH (21.55 SQ IN) - MODEL 0. FREE-JET SPEED 0. M/SEC (0. FPS)

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMIDL X03135

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 47.3 | 69.2 | 71.7 | 72.0 | 74.0 | 76.3 | 77.5 | 79.5 | 83.7 | 92.5 | 93.6 | 92.6 | 86.2 | 186.1 |
| 63 | 49.6 | 70.2 | 73.6 | 73.6 | 75.3 | 77.8 | 78.8 | 80.6 | 85.3 | 94.5 | 95.9 | 93.9 | 86.9 | 169.9 |
| 80 | 52.7 | 72.0 | 73.9 | 74.6 | 76.9 | 79.1 | 80.4 | 82.9 | 87.6 | 95.4 | 96.2 | 93.9 | 87.7 | 170.4 |
| 100 | 56.4 | 72.2 | 75.1 | 76.8 | 78.1 | 80.1 | 81.6 | 84.6 | 89.1 | 95.8 | 97.4 | 95.3 | 88.5 | 171.6 |
| 125 | 64.6 | 76.5 | 80.3 | 79.6 | 79.6 | 81.4 | 82.6 | 85.9 | 90.1 | 95.3 | 97.1 | 95.0 | 88.1 | 171.7 |
| 160 | 61.5 | 77.7 | 80.3 | 81.1 | 82.6 | 83.8 | 84.1 | 86.6 | 89.8 | 95.5 | 96.3 | 94.6 | 86.9 | 172.1 |
| 200 | 64.6 | 74.8 | 77.5 | 78.8 | 80.8 | 82.8 | 84.1 | 87.3 | 90.8 | 94.9 | 97.5 | 93.1 | 85.3 | 171.5 |
| 250 | 66.4 | 77.9 | 79.1 | 78.9 | 79.4 | 81.5 | 83.4 | 86.9 | 90.1 | 94.5 | 96.0 | 89.7 | 81.5 | 170.3 |
| 315 | 64.4 | 75.5 | 78.5 | 79.1 | 80.3 | 82.1 | 83.6 | 87.1 | 90.0 | 94.9 | 94.5 | 87.6 | 78.3 | 169.9 |
| 400 | 65.7 | 75.9 | 77.4 | 78.0 | 79.8 | 82.1 | 83.6 | 87.3 | 90.2 | 93.3 | 92.3 | 85.7 | 76.8 | 169.0 |
| 500 | 65.1 | 74.7 | 76.8 | 77.4 | 79.0 | 81.2 | 82.7 | 86.9 | 89.0 | 92.3 | 90.5 | 83.5 | 74.5 | 168.1 |
| 630 | 64.6 | 75.1 | 76.5 | 77.4 | 79.2 | 81.2 | 82.7 | 86.4 | 87.7 | 91.8 | 89.0 | 81.8 | 72.9 | 167.7 |
| 800 | 62.5 | 74.7 | 77.4 | 77.8 | 79.1 | 81.6 | 82.6 | 85.8 | 87.0 | 90.1 | 86.9 | 80.0 | 71.4 | 167.0 |
| 1000 | 60.7 | 73.3 | 76.2 | 76.0 | 80.1 | 81.2 | 82.1 | 84.8 | 86.4 | 88.8 | 85.6 | 77.9 | 68.9 | 166.6 |
| 1250 | 58.1 | 70.9 | 75.4 | 77.5 | 80.4 | 82.3 | 81.0 | 84.0 | 84.7 | 87.3 | 83.6 | 76.4 | 66.6 | 166.1 |
| 1600 | 54.8 | 68.7 | 73.1 | 75.3 | 78.4 | 80.0 | 80.0 | 79.7 | 82.3 | 82.0 | 84.4 | 80.2 | 73.0 | 164.9 |
| 2000 | 51.3 | 65.9 | 71.8 | 74.5 | 77.9 | 79.3 | 78.1 | 80.0 | 79.9 | 82.2 | 77.2 | 70.2 | 58.9 | 164.7 |
| 2500 | 44.1 | 62.2 | 67.6 | 71.3 | 76.9 | 77.7 | 74.6 | 76.9 | 76.8 | 77.0 | 72.0 | 63.7 | 50.5 | 163.7 |
| 3150 | 38.7 | 56.5 | 62.4 | 65.5 | 72.0 | 73.2 | 70.7 | 70.3 | 72.0 | 69.5 | 65.4 | 54.8 | 39.0 | 162.3 |
| 4000 | 31.3 | 47.4 | 56.4 | 60.8 | 63.3 | 65.0 | 64.0 | 63.6 | 64.5 | 63.7 | 55.1 | 41.0 | 19.6 | 161.9 |
| 5000 | 16.6 | 34.4 | 45.0 | 50.0 | 56.4 | 57.6 | 53.4 | 53.6 | 53.0 | 50.7 | 40.3 | 22.4 | | 161.3 |
| 6300 | | 15.1 | 25.3 | 32.8 | 38.4 | 40.1 | 38.6 | 35.9 | 35.6 | 29.8 | 17.1 | | | 159.4 |
| 8000 | | | | 7.3 | 12.1 | 14.1 | 14.6 | 10.2 | 10.1 | | | | | 158.8 |
| 10000 | | | | | | | | | | | | | | 160.0 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| GASPL | 74.7 | 86.9 | 89.2 | 90.0 | 91.8 | 93.6 | 94.5 | 97.6 | 100.5 | 105.7 | 106.5 | 103.2 | 96.0 | 162.0 |
| PWL | 79.2 | 91.7 | 95.2 | 97.1 | 100.3 | 101.7 | 101.3 | 103.9 | 106.0 | 109.8 | 109.2 | 104.2 | 95.9 | |
| PNLT | 79.9 | 92.3 | 95.2 | 97.1 | 101.5 | 102.9 | 101.8 | 103.9 | 106.0 | 109.8 | 109.2 | 104.2 | 95.9 | |

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-16-78 TAPE NO. N310 ALPHA SB59 TAMB 37.04
 LOCATION C41 ANECH CH AERO. RDG. ADH172 PAMB 29.4900 RELHUM 47.40

MODEL TEST POINT 0313 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 0. FREE-JET SPEED M/SEC (0. FPS)

07/19/79 17.289

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X03140
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

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TEST DATE 03-16-78

LOCATION C41 ANECH CH

TAPE NO. N310

AERO. RDG. ADH177

IALPHA S859

PAMB 29.4500

TAMB 41.18

RELHUM 33.20

MODEL TEST POINT 0314

ACQUSTIC RANGE 12.2 M (40.0 FT) ARC

SIZE 139.0 SQ CM (21.55 SQ IN) -

MODEL 117.35 M/SEC (385.0 FPS)

FREE-JET SPEED

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 35 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X03140

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 64.2 | 90.6 | 89.7 | 88.9 | 87.7 | 87.1 | 87.0 | 86.3 | 93.0 | 99.7 | 103.6 | 106.8 | 105.4 | 140.0 |
| 315 | 64.2 | 90.3 | 89.7 | 88.8 | 88.8 | 88.5 | 88.1 | 88.2 | 95.9 | 105.5 | 108.5 | 110.2 | 107.0 | 143.8 |
| 400 | 64.9 | 91.7 | 91.1 | 88.9 | 89.8 | 89.9 | 89.5 | 91.0 | 97.2 | 107.6 | 110.5 | 110.3 | 104.8 | 144.8 |
| 500 | 64.7 | 93.0 | 92.2 | 90.2 | 90.9 | 90.8 | 91.3 | 92.3 | 99.3 | 109.1 | 112.4 | 109.8 | 103.5 | 145.9 |
| 630 | 64.8 | 93.4 | 93.8 | 91.6 | 93.9 | 92.5 | 92.9 | 94.8 | 102.0 | 113.7 | 109.2 | 104.4 | 146.9 | |
| 800 | 78.2 | 95.2 | 94.8 | 92.8 | 93.0 | 93. | 94.0 | 96.4 | 103.6 | 110.8 | 114.2 | 109.1 | 106.7 | 147.5 |
| 1000 | 83.8 | 95.0 | 96.1 | 93.9 | 94.7 | 94.7 | 95.5 | 97.9 | 103.8 | 110.8 | 115.2 | 109.1 | 107.2 | 148.1 |
| 1250 | 86.4 | 96.8 | 97.8 | 95.9 | 96.9 | 96.8 | 96.5 | 99.4 | 105.2 | 110.8 | 115.3 | 109.2 | 107.7 | 148.4 |
| 1600 | 87.1 | 99.3 | 99.8 | 97.2 | 96.5 | 96.9 | 97.2 | 99.8 | 106.1 | 111.4 | 114.6 | 108.3 | 107.8 | 148.3 |
| 2000 | 89.8 | 97.7 | 97.7 | 96.6 | 95.8 | 95.0 | 97.5 | 100.5 | 106.4 | 112.0 | 113.5 | 109.2 | 108.0 | 148.1 |
| 2500 | 90.2 | 97.8 | 98.4 | 96.3 | 96.9 | 97.5 | 99.0 | 101.2 | 107.5 | 111.7 | 113.0 | 109.0 | 108.5 | 148.1 |
| 3150 | 91.4 | 99.3 | 98.7 | 97.4 | 97.5 | 98.2 | 99.5 | 102.5 | 107.3 | 111.2 | 111.6 | 107.7 | 107.1 | 147.5 |
| 4000 | 92.1 | 97.8 | 97.2 | 96.6 | 97.1 | 98.4 | 99.9 | 102.9 | 107.2 | 111.0 | 111.0 | 106.4 | 105.9 | 147.2 |
| 5000 | 93.2 | 98.7 | 99.3 | 97.2 | 98.6 | 99.5 | 100.1 | 103.2 | 106.9 | 109.6 | 109.0 | 104.8 | 105.3 | 146.5 |
| 6300 | 97.5 | 102.3 | 100.2 | 99.3 | 99.5 | 100.6 | 99.6 | 102.9 | 106.1 | 108.4 | 107.5 | 103.5 | 104.6 | 146.2 |
| 8000 | 96.4 | 103.2 | 104.0 | 100.8 | 102.1 | 100.8 | 99.8 | 102.1 | 105.7 | 107.8 | 106.6 | 103.3 | 105.1 | 146.7 |
| 10000 | 95.2 | 103.6 | 103.6 | 102.5 | 104.0 | 102.4 | 99.9 | 101.9 | 104.3 | 106.4 | 105.3 | 103.3 | 105.6 | 147.1 |
| 12500 | 95.2 | 102.3 | 104.1 | 103.4 | 102.9 | 102.3 | 99.9 | 100.9 | 103.9 | 103.3 | 104.1 | 103.2 | 105.8 | 147.6 |
| 16000 | 93.1 | 100.0 | 100.5 | 100.8 | 102.2 | 102.2 | 99.5 | 100.8 | 103.3 | 103.8 | 101.3 | 101.3 | 104.1 | 147.3 |
| 20000 | 91.1 | 98.4 | 100.1 | 99.3 | 101.4 | 100.5 | 97.8 | 99.4 | 99.4 | 97.8 | 95.8 | 96.5 | 101.2 | 146.7 |
| 25000 | 85.3 | 94.9 | 95.9 | 96.6 | 98.6 | 98.5 | 94.8 | 93.4 | 99.4 | 99.2 | 97.5 | 94.3 | 99.6 | 147.0 |
| 31500 | 82.9 | 91.5 | 92.4 | 91.9 | 93.4 | 92.6 | 91.7 | 92.4 | 95.3 | 94.9 | 94.2 | 90.1 | 95.9 | 146.0 |
| 40000 | 80.9 | 86.6 | 89.1 | 90.2 | 91.2 | 90.3 | 86.7 | 87.6 | 91.1 | 88.4 | 87.6 | 85.2 | 90.1 | 146.0 |
| 50000 | 75.3 | 80.5 | 83.5 | 83.9 | 83.7 | 83.2 | 81.4 | 80.5 | 86.9 | 81.9 | 81.9 | 80.2 | 85.0 | 144.4 |
| 63000 | 67.4 | 74.4 | 74.9 | 76.5 | 74.8 | 74.7 | 75.7 | 74.2 | 80.5 | 76.0 | 77.4 | 73.0 | 78.5 | 142.8 |
| 80000 | 60.4 | 66.9 | 66.9 | 68.7 | 68.0 | 68.4 | 67.0 | 67.6 | 70.7 | 66.2 | 67.6 | 63.2 | 68.7 | 141.3 |

OASPL 104.6 112.1 112.5 111.2 112.0 111.7 110.9 113.2 117.7 122.3 124.5 120.6 119.2 160.7

| | | | |
|------------------------------|----------------------------|--------|-----------------------------|
| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 385.00 | REFRACTION CORRECTION - YES |
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| | | | |
|-----------------------|-------------------|--------------|--------------|
| TEST DATE 03-16-78 | TAPE NO. N310 | TALPHA 3859 | TAKB 41.18 |
| LOCATION C41 ANECH CH | AERO. RDG. ADH177 | PAMB 29.4500 | RELHUM 33.20 |

| | | | |
|------------------|-----------------------|------------------------------------|---------------------------|
| MODEL TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
| 0300 0314 | 12.2 M (40.0 FT) ARC | 139.0 SQ CM (21.55 SQ IN) - MODEL | 117.35 M/SEC (385.0 FPS) |

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07/19/79 17.289

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 35 2400.0 FT. SL

IDENTIFICATION - FJ-400-FR00L X03145

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 50 | 43.6 | 71.9 | 72.4 | 70.9 | 72.2 | 72.4 | 71.9 | 73.0 | 78.5 | 87.6 | 89.2 | 88.8 | 78.0 | 162.9 |
| 63 | 43.4 | 73.2 | 73.5 | 72.2 | 73.3 | 73.3 | 73.7 | 74.3 | 80.6 | 89.3 | 91.1 | 88.3 | 76.6 | 164.0 |
| 80 | 43.4 | 73.6 | 75.1 | 73.6 | 76.2 | 76.0 | 75.3 | 76.8 | 83.2 | 90.5 | 92.3 | 89.6 | 77.4 | 165.1 |
| 100 | 56.7 | 75.2 | 76.0 | 74.7 | 75.3 | 76.0 | 76.4 | 76.3 | 85.0 | 90.9 | 92.7 | 89.3 | 79.5 | 165.8 |
| 125 | 62.2 | 75.0 | 77.2 | 75.7 | 76.9 | 77.2 | 77.6 | 79.7 | 84.9 | 90.8 | 93.6 | 89.2 | 79.8 | 166.2 |
| 150 | 64.6 | 76.7 | 77.6 | 76.7 | 77.6 | 79.0 | 79.1 | 81.1 | 86.2 | 90.6 | 93.5 | 89.1 | 80.0 | 166.5 |
| 200 | 65.1 | 79.0 | 80.6 | 78.8 | 78.5 | 79.0 | 79.1 | 81.3 | 86.9 | 91.0 | 92.6 | 83.8 | 79.5 | 166.4 |
| 250 | 67.4 | 77.0 | 78.2 | 77.9 | 77.5 | 77.9 | 79.3 | 82.0 | 87.0 | 91.4 | 91.2 | 84.4 | 79.1 | 166.3 |
| 315 | 67.5 | 76.8 | 78.6 | 77.3 | 78.4 | 79.1 | 80.8 | 82.2 | 87.8 | 90.7 | 90.2 | 83.5 | 78.8 | 166.2 |
| 400 | 68.2 | 77.9 | 78.5 | 78.1 | 78.7 | 79.6 | 80.7 | 83.2 | 87.2 | 89.6 | 88.3 | 81.6 | 76.4 | 165.6 |
| 500 | 68.3 | 76.0 | 76.8 | 77.0 | 78.0 | 79.5 | 80.9 | 83.3 | 86.8 | 89.2 | 87.2 | 79.7 | 74.3 | 165.3 |
| 630 | 68.9 | 76.6 | 78.5 | 77.4 | 79.2 | 80.3 | 80.8 | 83.4 | 86.1 | 87.4 | 84.7 | 77.4 | 72.6 | 164.6 |
| 800 | 72.8 | 79.7 | 79.1 | 79.1 | 79.9 | 81.2 | 80.0 | 82.8 | 85.1 | 85.9 | 82.8 | 75.4 | 70.8 | 164.3 |
| 1000 | 71.2 | 80.4 | 82.7 | 80.5 | 82.4 | 81.2 | 80.1 | 81.8 | 84.4 | 84.9 | 81.4 | 74.5 | 70.1 | 164.8 |
| 1250 | 69.5 | 80.4 | 82.1 | 82.0 | 84.1 | 82.7 | 80.1 | 81.4 | 82.8 | 83.2 | 79.7 | 69.1 | 65.2 | 165.2 |
| 1500 | 68.6 | 78.5 | 82.1 | 82.6 | 82.8 | 82.3 | 79.8 | 80.1 | 81.9 | 82.5 | 77.5 | 72.2 | 67.0 | 165.7 |
| 2000 | 65.6 | 76.6 | 78.2 | 79.8 | 81.9 | 82.1 | 79.2 | 79.8 | 81.0 | 79.4 | 75.8 | 68.7 | 62.3 | 165.5 |
| 2500 | 61.8 | 72.9 | 76.9 | 77.6 | 80.6 | 79.9 | 78.8 | 77.7 | 76.2 | 72.2 | 66.4 | 61.1 | 54.5 | 164.8 |
| 3150 | 52.6 | 66.8 | 70.7 | 73.4 | 76.4 | 76.6 | 72.5 | 70.2 | 74.3 | 71.2 | 64.8 | 53.9 | 44.4 | 165.1 |
| 4000 | 44.0 | 58.8 | 63.5 | 65.4 | 68.1 | 67.8 | 66.5 | 65.8 | 66.3 | 62.1 | 55.3 | 40.8 | 26.2 | 164.2 |
| 5000 | 32.2 | 46.2 | 54.0 | 58.2 | 60.9 | 60.7 | 58.4 | 55.7 | 56.0 | 48.1 | 38.9 | 22.2 | 184.2 | |
| 6300 | 6.8 | 25.9 | 36.3 | 41.1 | 43.4 | 43.7 | 41.1 | 37.8 | 39.6 | 27.3 | 15.4 | 162.5 | 161.0 | |
| 8000 | | | | | | | | | | | | | | 159.4 |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GASPL 79.8 89.7 91.5 91.0 92.3 92.3 91.6 93.5 97.3 101.3 102.1 95.3 89.1 178.7
PNL 87.0 97.8 100.5 100.7 102.5 102.3 100.5 101.6 104.2 105.9 104.9 97.8 92.1
PNLT 88.3 97.8 101.2 101.8 103.6 103.4 100.5 101.6 104.3 105.9 104.9 97.8 92.1

DIAMETER RATIO 8.681 FREQUENCY SHIFT -9

TEST DATE 03-16-78 TAPE NO. N310 ALPHA 3859 TAMB 41.18
LOCATION C41 ANECH CH AERO. RDG. ADH177 PAMB 29.4500 RELHUM 33.20

MODEL TEST POINT ACQUSTIC RANGE SIZE FREE-JET SPEED
0300 0314 731.5 M (2400.0 FT) SL 9332.2 SQ CM (1400.00 SQ IN) - FULL 117.35 M/SEC (386.0 FPS)

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZERRFMDL X03150
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

FREQ

50

63

80

100

125

160

200

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 61.8 | 68.1 | 68.3 | 68.4 | 69.5 | 91.3 | 94.2 | 96.4 | 96.6 | 105.6 | 110.0 | 112.7 | 111.9 | 146.0 |
| 315 | 65.1 | 67.7 | 68.7 | 69.5 | 91.3 | 93.2 | 94.1 | 96.2 | 100.7 | 107.8 | 111.6 | 114.6 | 113.0 | 147.6 |
| 400 | 68.4 | 68.9 | 90.2 | 89.5 | 91.3 | 93.5 | 94.6 | 97.2 | 102.0 | 111.8 | 114.7 | 115.8 | 113.0 | 149.7 |
| 500 | 71.0 | 89.5 | 92.3 | 91.3 | 92.4 | 94.8 | 96.2 | 98.1 | 102.8 | 112.9 | 116.2 | 116.9 | 113.6 | 150.9 |
| 630 | 73.6 | 91.1 | 92.4 | 92.4 | 94.3 | 96.1 | 97.3 | 100.2 | 104.9 | 113.0 | 116.3 | 116.8 | 114.7 | 151.1 |
| 800 | 76.3 | 90.9 | 93.7 | 94.2 | 95.0 | 96.9 | 98.5 | 101.7 | 106.9 | 113.2 | 116.4 | 117.5 | 114.9 | 151.6 |
| 1000 | 84.4 | 96.5 | 97.7 | 96.0 | 96.1 | 98.2 | 99.6 | 102.8 | 108.0 | 113.3 | 115.9 | 117.1 | 114.5 | 151.4 |
| 1250 | 81.8 | 95.3 | 97.6 | 97.1 | 98.7 | 100.6 | 100.7 | 104.1 | 108.3 | 112.7 | 116.0 | 117.2 | 114.4 | 151.5 |
| 1600 | 85.4 | 94.0 | 95.7 | 96.0 | 97.6 | 100.0 | 101.1 | 104.8 | 109.0 | 112.8 | 116.3 | 117.5 | 113.6 | 151.6 |
| 2000 | 87.5 | 97.3 | 98.3 | 96.8 | 96.9 | 98.8 | 100.9 | 104.6 | 108.8 | 113.2 | 115.9 | 116.1 | 111.6 | 151.0 |
| 2500 | 87.2 | 95.7 | 97.7 | 97.5 | 98.6 | 99.7 | 101.8 | 105.5 | 108.7 | 113.6 | 116.0 | 114.0 | 108.7 | 150.7 |
| 3150 | 89.0 | 97.3 | 97.6 | 97.3 | 98.4 | 100.3 | 102.1 | 105.8 | 109.6 | 112.7 | 115.4 | 112.5 | 107.8 | 150.2 |
| 4000 | 88.6 | 96.5 | 97.5 | 96.5 | 97.5 | 99.4 | 101.5 | 105.5 | 108.5 | 112.4 | 113.9 | 111.4 | 106.9 | 149.3 |
| 5000 | 88.9 | 97.2 | 97.2 | 97.0 | 98.0 | 100.1 | 102.3 | 105.7 | 107.7 | 112.9 | 112.5 | 109.7 | 105.6 | 149.0 |
| 6300 | 87.5 | 97.5 | 98.7 | 97.9 | 98.7 | 100.5 | 101.5 | 105.4 | 107.6 | 112.2 | 111.1 | 108.9 | 104.8 | 148.6 |
| 8000 | 86.2 | 96.4 | 98.0 | 98.3 | 99.4 | 100.5 | 101.3 | 104.7 | 107.5 | 110.6 | 110.1 | 107.4 | 104.7 | 148.0 |
| 10000 | 83.8 | 94.6 | 97.0 | 97.7 | 100.0 | 101.4 | 100.8 | 103.7 | 106.5 | 110.0 | 108.0 | 107.5 | 103.5 | 147.7 |
| 12500 | 81.3 | 92.9 | 95.6 | 96.3 | 98.6 | 100.4 | 99.9 | 102.6 | 103.7 | 107.5 | 105.7 | 105.2 | 101.3 | 146.5 |
| 16000 | 79.3 | 92.0 | 95.1 | 96.1 | 98.5 | 99.2 | 98.2 | 101.1 | 102.5 | 105.8 | 103.9 | 103.0 | 99.7 | 146.4 |
| 20000 | 74.2 | 89.0 | 91.8 | 93.8 | 97.0 | 98.1 | 95.5 | 98.4 | 100.0 | 102.1 | 100.5 | 100.1 | 96.6 | 145.3 |
| 25000 | 73.1 | 86.3 | 89.0 | 90.0 | 94.8 | 95.1 | 93.0 | 93.3 | 97.1 | 97.3 | 96.6 | 96.1 | 94.9 | 144.1 |
| 31500 | 71.2 | 81.4 | 86.6 | 88.4 | 89.3 | 89.8 | 89.3 | 90.6 | 93.7 | 95.9 | 94.5 | 90.8 | 89.5 | 144.0 |
| 40000 | 68.8 | 75.8 | 81.6 | 82.7 | 87.9 | 87.8 | 83.9 | 86.0 | 88.9 | 90.8 | 89.2 | 85.8 | 85.5 | 143.6 |
| 50000 | 59.7 | 70.9 | 74.0 | 77.1 | 79.5 | 80.4 | 78.9 | 78.7 | 84.1 | 84.8 | 83.6 | 81.6 | 79.2 | 141.9 |
| 63000 | 54.2 | 65.7 | 68.0 | 70.5 | 71.5 | 72.7 | 73.2 | 72.7 | 79.4 | 78.4 | 77.8 | 76.1 | 74.6 | 141.3 |
| 80000 | 48.4 | 57.8 | 62.0 | 65.1 | 64.7 | 66.6 | 65.7 | 66.7 | 73.2 | 73.0 | 72.9 | 68.6 | 67.2 | 142.1 |

OASPL 97.6 107.6 109.1 108.9 110.4 112.0 112.9 116.3 119.7 124.7 127.0 127.3 124.2 162.9

TEST DATE 03-16-78 TAPE NO. N310 IALPHA SB59 TAMB 37.04
LOCATION C41 ANECH CH AERO. RDG. ADH171 PAMB 29.4900 RELHUM 47.40

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 0. M/SEC (0. FPS)
0300 0315

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07/19/79 17.289

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 98 40.0 FT. ARC

IDENTIFICATION - FJ-ZERRFMOOL X03150

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PHL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

10000000

12500000

16000000

20000000

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES TURBULANCE CORRECTION - YES

TEST DATE 03-16-78 TAPE NO. N310 ALPHA 3859 TAPS 37.04
LOCATION C41 ANECH CH AERO. RDG. ADH171 PAMB 29.4900 RELHUM 47.40

MODEL TEST POINT 0315 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CH (21.55 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

913

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZERRFMDL X03155

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 47.1 | 69.2 | 71.5 | 71.5 | 73.8 | 76.0 | 77.0 | 79.2 | 83.2 | 92.0 | 93.3 | 92.3 | 86.2 | 167.8 |
| 63 | 49.6 | 69.7 | 73.6 | 73.3 | 74.8 | 77.3 | 78.6 | 80.1 | 84.1 | 93.0 | 94.9 | 93.4 | 86.7 | 169.0 |
| 80 | 52.2 | 71.3 | 73.6 | 74.4 | 76.8 | 78.6 | 79.8 | 82.1 | 86.1 | 93.1 | 94.9 | 93.1 | 87.7 | 169.2 |
| 100 | 56.9 | 71.0 | 74.8 | 76.1 | 77.4 | 79.4 | 80.9 | 83.6 | 88.1 | 93.3 | 94.9 | 93.8 | 87.8 | 169.7 |
| 125 | 62.8 | 76.5 | 78.8 | 77.9 | 78.4 | 80.6 | 81.9 | 84.6 | 89.1 | 93.3 | 94.4 | 93.2 | 87.1 | 169.5 |
| 160 | 60.0 | 75.2 | 78.8 | 78.8 | 80.8 | 82.8 | 82.8 | 85.8 | 89.3 | 92.5 | 94.3 | 93.1 | 86.6 | 169.6 |
| 200 | 63.3 | 73.6 | 76.5 | 77.5 | 79.6 | 82.1 | 83.1 | 86.3 | 89.8 | 92.4 | 94.3 | 93.1 | 85.3 | 169.7 |
| 250 | 65.2 | 76.7 | 78.9 | 78.2 | 78.7 | 80.7 | 82.7 | 85.9 | 89.4 | 92.5 | 93.5 | 91.2 | 82.7 | 169.1 |
| 315 | 64.4 | 74.7 | 78.0 | 78.6 | 80.1 | 81.4 | 83.3 | 86.6 | 89.0 | 92.6 | 93.3 | 88.6 | 79.0 | 168.8 |
| 400 | 65.7 | 75.9 | 77.4 | 78.0 | 79.6 | 81.6 | 83.3 | 86.5 | 89.4 | 91.3 | 92.1 | 86.5 | 77.1 | 168.3 |
| 500 | 64.9 | 74.7 | 77.0 | 76.9 | 78.5 | 80.5 | 82.5 | 85.9 | 88.0 | 90.6 | 90.0 | 84.7 | 75.2 | 167.4 |
| 630 | 64.6 | 75.1 | 76.5 | 77.1 | 78.7 | 80.9 | 82.9 | 85.9 | 87.0 | 90.8 | 88.3 | 82.3 | 72.9 | 167.1 |
| 800 | 62.8 | 74.9 | 77.7 | 77.8 | 79.1 | 81.1 | 81.9 | 85.3 | 86.8 | 89.6 | 86.4 | 80.8 | 70.9 | 166.7 |
| 1000 | 61.0 | 73.5 | 76.7 | 77.0 | 78.0 | 79.6 | 80.9 | 81.6 | 84.4 | 86.2 | 87.8 | 84.9 | 78.6 | 166.1 |
| 1250 | 58.1 | 71.4 | 75.4 | 77.3 | 80.2 | 81.8 | 81.0 | 83.2 | 85.0 | 86.8 | 82.3 | 77.9 | 67.1 | 165.9 |
| 1600 | 54.8 | 69.2 | 73.6 | 75.5 | 78.4 | 80.5 | 79.7 | 81.8 | 81.7 | 83.7 | 79.2 | 74.2 | 62.5 | 164.6 |
| 2000 | 51.8 | 67.7 | 72.8 | 75.0 | 78.1 | 79.1 | 77.8 | 80.0 | 80.1 | 81.4 | 76.4 | 70.5 | 57.9 | 164.5 |
| 2500 | 44.9 | 63.4 | 68.8 | 72.1 | 76.1 | 77.5 | 74.8 | 76.7 | 76.8 | 76.5 | 71.2 | 64.7 | 49.8 | 163.5 |
| 3150 | 40.4 | 58.2 | 63.9 | 66.7 | 72.5 | 73.2 | 70.7 | 70.0 | 72.0 | 69.3 | 63.9 | 55.8 | 39.8 | 162.3 |
| 4000 | 32.3 | 48.7 | 57.7 | 61.8 | 64.1 | 65.0 | 64.0 | 64.0 | 64.7 | 63.2 | 55.6 | 41.5 | 19.9 | 162.1 |
| 5000 | 18.1 | 35.4 | 46.5 | 50.7 | 57.6 | 58.1 | 53.7 | 54.0 | 53.7 | 50.5 | 40.5 | 22.9 | | 161.7 |
| 6300 | | 16.4 | 26.8 | 34.3 | 39.1 | 40.9 | 38.6 | 35.9 | 36.9 | 30.3 | 17.1 | | | 160.0 |
| 8000 | | | | | | | | | | | | | | 159.4 |
| 10000 | | | | | | | | | | | | | | 160.2 |

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OASPL 74.1 86.1 88.8 89.4 91.2 93.1 94.0 96.9 99.7 103.7 104.5 102.5 95.8 180.8
PNL 79.0 91.6 95.6 97.2 99.8 101.4 101.0 103.4 105.4 108.0 107.5 104.2 95.9
PNLT 79.7 92.2 95.6 97.7 101.2 102.6 101.0 103.4 105.9 108.0 107.5 104.2 97.0

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-16-78 TAPE NO. N310 ALPHA SB59 TAMB 37.04
LOCATION C41 ANECH CH AERO. RDG. ADH171 PAMB 29.4900 RELHUM 47.40

MODEL TEST POINT 0315 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. FREE-JET SPEED 0. M/SEC (0. FPS)

07/19/79 17.289

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X03160
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

OASPL

96.0

104.6

105.8

107.4

108.6

109.3

112.8

116.1

120.8

121.8

118.3

113.1

157.9

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TEST DATE 03-16-78

LOCATION C41 ANECH CH

TAPE NO. N310

AERO. RDG. ADH186

I ALPHA

PAMB 29.4600

TAMB 42.08

RELHUM 29.60

MODEL TEST POINT

0300 0316

ACOUSTIC RANGE

12.2 M (40.0 FT)

ARC

139.0 SQ CM (

SIZE

21.55 SQ IN)

- MODEL

117.65 M/SEC (

FREE-JET SPEED

396.0 FPS)

315

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS

66.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X03160

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 74.8 | 69.7 | 69.0 | 66.7 | 67.2 | 66.3 | 67.2 | 67.5 | 91.7 | 98.5 | 102.1 | 105.5 | 104.7 | 136.9 |
| 315 | 74.8 | 69.7 | 69.0 | 66.7 | 66.4 | 66.0 | 67.6 | 66.2 | 94.5 | 103.9 | 107.1 | 105.6 | 105.6 | 142.3 |
| 400 | 75.3 | 61.3 | 60.4 | 66.4 | 66.6 | 66.6 | 66.7 | 90.2 | 96.2 | 105.1 | 109.3 | 109.5 | 104.5 | 143.5 |
| 500 | 75.3 | 61.9 | 61.2 | 69.0 | 69.9 | 69.7 | 90.1 | 92.0 | 98.3 | 106.2 | 109.8 | 108.8 | 102.6 | 143.7 |
| 630 | 75.0 | 62.6 | 62.6 | 60.6 | 63.1 | 60.9 | 91.0 | 93.4 | 100.6 | 107.0 | 110.3 | 107.7 | 102.9 | 144.1 |
| 800 | 75.3 | 63.9 | 63.6 | 61.6 | 62.2 | 62.1 | 92.6 | 95.0 | 102.3 | 108.1 | 109.7 | 106.2 | 103.6 | 144.2 |
| 1000 | 82.0 | 63.5 | 63.9 | 63.2 | 62.7 | 63.6 | 94.0 | 96.7 | 102.6 | 107.6 | 110.2 | 105.1 | 103.4 | 144.2 |
| 1250 | 84.7 | 65.1 | 66.0 | 63.4 | 65.2 | 65.1 | 95.3 | 97.4 | 103.6 | 107.9 | 109.5 | 103.6 | 103.0 | 144.2 |
| 1600 | 85.2 | 67.7 | 67.9 | 65.8 | 65.3 | 66.2 | 96.1 | 98.6 | 104.6 | 109.0 | 108.4 | 103.4 | 103.5 | 144.6 |
| 2000 | 88.5 | 66.5 | 66.7 | 65.6 | 65.1 | 65.0 | 96.5 | 98.4 | 104.6 | 109.2 | 108.9 | 104.5 | 104.5 | 144.9 |
| 2500 | 88.8 | 66.9 | 66.6 | 65.6 | 65.5 | 66.5 | 98.0 | 99.9 | 106.0 | 109.1 | 108.5 | 105.4 | 104.4 | 145.2 |
| 3150 | 90.5 | 68.1 | 67.9 | 66.4 | 66.6 | 67.5 | 98.3 | 101.4 | 105.6 | 109.2 | 108.9 | 104.9 | 105.1 | 145.5 |
| 4000 | 92.3 | 68.7 | 68.2 | 67.2 | 66.7 | 67.9 | 99.0 | 101.9 | 105.8 | 109.6 | 108.4 | 105.2 | 105.3 | 145.8 |
| 5000 | 92.0 | 68.1 | 68.1 | 66.3 | 67.4 | 68.7 | 99.9 | 103.0 | 106.0 | 109.0 | 107.8 | 104.5 | 106.2 | 145.8 |
| 6300 | 95.4 | 101.3 | 100.0 | 98.1 | 99.0 | 100.1 | 99.8 | 102.2 | 105.7 | 107.3 | 106.5 | 103.6 | 104.8 | 145.5 |
| 8000 | 97.1 | 104.2 | 103.1 | 99.7 | 101.6 | 100.7 | 99.6 | 101.9 | 104.6 | 107.1 | 105.2 | 103.0 | 104.4 | 146.1 |
| 10000 | 95.7 | 103.5 | 103.6 | 102.5 | 103.9 | 102.6 | 99.9 | 101.6 | 103.6 | 105.6 | 104.0 | 103.3 | 104.6 | 146.7 |
| 12500 | 94.9 | 102.0 | 103.8 | 102.8 | 102.4 | 100.0 | 100.8 | 103.3 | 105.2 | 103.2 | 102.8 | 105.1 | 147.1 | |
| 16000 | 92.5 | 100.2 | 100.2 | 100.2 | 101.6 | 100.8 | 99.7 | 100.8 | 102.1 | 102.5 | 100.3 | 100.4 | 103.0 | 146.6 |
| 20000 | 91.0 | 99.0 | 99.4 | 99.0 | 100.5 | 99.6 | 97.0 | 98.8 | 98.0 | 96.9 | 94.8 | 95.6 | 100.8 | 146.0 |
| 25000 | 85.7 | 95.7 | 95.7 | 95.5 | 98.2 | 97.1 | 93.1 | 92.5 | 98.4 | 98.1 | 96.4 | 94.2 | 99.0 | 146.3 |
| 31500 | 83.2 | 92.1 | 92.0 | 91.5 | 92.7 | 91.9 | 91.6 | 92.0 | 94.0 | 92.9 | 91.4 | 89.3 | 94.0 | 145.1 |
| 40000 | 81.2 | 86.6 | 88.9 | 89.0 | 90.7 | 89.9 | 85.7 | 86.6 | 89.2 | 85.9 | 85.2 | 83.7 | 88.1 | 145.0 |
| 50000 | 75.6 | 81.0 | 83.3 | 83.9 | 82.8 | 82.5 | 80.9 | 79.7 | 84.4 | 79.4 | 78.6 | 77.6 | 82.7 | 143.3 |
| 63000 | 67.3 | 74.4 | 75.2 | 76.6 | 74.1 | 74.0 | 74.6 | 72.7 | 79.0 | 75.0 | 75.2 | 72.2 | 77.6 | 142.0 |
| 80000 | 60.5 | 67.2 | 67.4 | 68.0 | 67.3 | 67.9 | 66.4 | 67.1 | 69.2 | 65.2 | 65.4 | 62.4 | 67.8 | 140.8 |

GASPL 104.2 111.8 111.9 110.5 111.4 111.1 110.3 112.5 116.5 120.2 120.8 118.5 117.4 159.0

| | | | |
|------------------------------|----------------------------|--------|-----------------------------|
| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 386.00 | REFRACTION CORRECTION - YES |
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| | | | |
|-----------------------|-------------------|--------------|--------------|
| TEST DATE 03-15-78 | TAPE NO. N310 | ALPHA 3859 | YAMB 42.08 |
| LOCATION C41 ANTCH CH | AERO. RDG. ADH186 | PAMB 29.4600 | RELHUM 29.60 |

| | | | | |
|------------------|---------------|-----------------------|------------------------------------|---------------------------|
| MODEL TEST POINT | ACUSTIC RANGE | 12.2 M (40.0 FT) ARC | 139.0 SQ CM (21.55 SQ IN) - MODEL | 117.65 M/SEC (386.0 FPS) |
| 0300 | 0316 | | | |

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07/19/79 17.289

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X03165

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 54.0 | 71.5 | 71.7 | 70.4 | 71.2 | 71.4 | 71.1 | 72.2 | 77.5 | 85.3 | 88.0 | 86.0 | 77.7 | 161.7 |
| 63 | 54.0 | 72.1 | 72.5 | 71.0 | 72.3 | 72.3 | 72.5 | 73.9 | 79.5 | 86.4 | 88.4 | 86.2 | 76.7 | 161.6 |
| 80 | 53.6 | 72.7 | 73.8 | 72.5 | 73.4 | 73.4 | 73.3 | 75.4 | 81.6 | 87.2 | 88.9 | 84.0 | 75.9 | 162.2 |
| 100 | 53.6 | 74.0 | 75.0 | 73.5 | 74.6 | 74.5 | 75.1 | 76.9 | 83.5 | 88.2 | 88.3 | 82.4 | 76.7 | 162.3 |
| 125 | 60.4 | 73.5 | 75.0 | 75.0 | 74.9 | 76.0 | 76.3 | 78.5 | 83.7 | 87.6 | 88.6 | 81.2 | 76.0 | 162.3 |
| 160 | 63.0 | 74.9 | 77.0 | 75.1 | 77.3 | 77.4 | 77.4 | 79.1 | 84.6 | 87.7 | 87.7 | 79.5 | 75.2 | 162.3 |
| 200 | 63.2 | 77.3 | 78.7 | 77.3 | 77.2 | 78.3 | 78.1 | 80.3 | 85.5 | 88.6 | 86.3 | 79.0 | 75.2 | 162.7 |
| 250 | 66.2 | 75.8 | 77.2 | 76.9 | 76.8 | 76.9 | 78.3 | 80.7 | 85.2 | 88.5 | 86.5 | 79.6 | 75.6 | 163.0 |
| 315 | 66.0 | 75.9 | 76.9 | 76.6 | 78.0 | 78.2 | 79.5 | 81.0 | 86.2 | 88.1 | 85.7 | 80.0 | 74.7 | 163.3 |
| 400 | 67.2 | 76.7 | 77.8 | 77.1 | 77.8 | 78.8 | 79.5 | 82.2 | 85.4 | 87.8 | 85.6 | 78.6 | 74.4 | 163.6 |
| 500 | 68.5 | 77.0 | 77.7 | 77.6 | 77.6 | 79.0 | 79.9 | 82.4 | 85.4 | 87.9 | 84.6 | 78.4 | 73.6 | 163.9 |
| 630 | 67.7 | 75.9 | 77.4 | 76.4 | 78.0 | 79.6 | 80.6 | 83.2 | 85.3 | 86.9 | 83.5 | 77.1 | 73.4 | 163.9 |
| 800 | 70.6 | 78.6 | 79.0 | 77.9 | 79.4 | 80.7 | 80.3 | 82.1 | 84.6 | 84.7 | 81.7 | 76.5 | 70.9 | 163.6 |
| 1000 | 71.9 | 81.4 | 81.8 | 79.4 | 81.8 | 81.2 | 79.8 | 81.6 | 83.5 | 84.3 | 80.0 | 74.2 | 69.3 | 164.3 |
| 1250 | 70.1 | 80.4 | 82.3 | 82.0 | 84.1 | 82.9 | 80.0 | 81.1 | 82.0 | 82.4 | 78.4 | 73.7 | 68.3 | 164.9 |
| 1600 | 68.3 | 78.2 | 81.8 | 82.0 | 82.7 | 82.5 | 79.6 | 80.0 | 81.3 | 81.4 | 76.7 | 71.8 | 66.3 | 165.3 |
| 2000 | 65.0 | 75.8 | 77.9 | 79.2 | 81.3 | 80.7 | 79.4 | 79.8 | 79.8 | 78.2 | 72.9 | 67.8 | 61.1 | 164.7 |
| 2500 | 61.7 | 73.4 | 76.2 | 77.2 | 79.7 | 79.0 | 76.1 | 77.1 | 74.6 | 71.3 | 65.5 | 60.2 | 54.1 | 164.1 |
| 3150 | 53.0 | 67.7 | 70.6 | 73.2 | 75.9 | 75.1 | 70.9 | 69.2 | 73.3 | 70.1 | 63.8 | 53.9 | 43.8 | 164.4 |
| 4000 | 44.3 | 59.3 | 63.1 | 65.0 | 67.5 | 67.1 | 66.4 | 65.5 | 65.1 | 60.2 | 52.5 | 40.0 | 24.3 | 163.2 |
| 5000 | 32.5 | 46.3 | 53.8 | 57.0 | 60.5 | 60.2 | 55.5 | 54.6 | 54.0 | 45.6 | 36.5 | 20.8 | | 163.2 |
| 6300 | 9.1 | 26.5 | 36.1 | 41.2 | 42.5 | 43.0 | 40.6 | 36.9 | 37.2 | 24.9 | 12.1 | | | 161.4 |
| 8000 | | 6.6 | 14.6 | 15.7 | 16.7 | 16.4 | 10.7 | 10.5 | | | | | | 160.1 |
| 10000 | | | | | | | | | | | | | | 158.7 |

ORIGINAL PAGE IS
OF POOR QUALITY.

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-18-78 TAPE NO. N310 ALPHA 3859 TAMB 42.08
LOCATION C41 ANECH CH AERO. RDG. ADH166 PAMB 29.4600 RELHUM 29.60

MODEL TEST POINT 0316 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.65 M/SEC (386.0 FPS) FREE-JET SPEED

07/19/79 17.289

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT RH. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X03170
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PML

FREQ
50
63
80

100
125
160
200

ORIGINAL PAGE IS
OF POOR QUALITY

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 62.3 | 66.6 | 68.6 | 69.7 | 69.7 | 92.1 | 94.5 | 96.1 | 99.1 | 105.9 | 110.0 | 113.0 | 112.4 | 146.3 |
| 315 | 65.4 | 68.7 | 69.5 | 91.6 | 93.7 | 94.6 | 96.7 | 100.9 | 108.0 | 111.6 | 114.6 | 112.7 | 147.7 | |
| 400 | 68.7 | 69.2 | 90.7 | 90.0 | 91.6 | 93.7 | 95.6 | 97.7 | 103.5 | 112.3 | 115.6 | 113.3 | 150.0 | |
| 500 | 71.5 | 90.0 | 92.3 | 91.6 | 92.9 | 95.3 | 96.4 | 99.1 | 104.3 | 113.6 | 116.5 | 113.6 | 151.2 | |
| 630 | 73.8 | 91.4 | 92.6 | 92.4 | 94.5 | 96.4 | 98.3 | 101.2 | 105.9 | 114.2 | 117.8 | 117.3 | 152.1 | |
| 800 | 79.8 | 91.9 | 94.2 | 94.7 | 95.5 | 97.6 | 99.0 | 102.4 | 108.2 | 115.0 | 117.9 | 118.3 | 152.6 | |
| 1000 | 85.4 | 97.7 | 99.0 | 97.0 | 96.9 | 99.0 | 100.6 | 103.3 | 108.5 | 114.3 | 117.9 | 118.4 | 152.8 | |
| 1250 | 83.3 | 95.8 | 98.8 | 98.9 | 99.5 | 101.1 | 101.7 | 104.9 | 108.6 | 113.9 | 118.5 | 119.0 | 153.1 | |
| 1600 | 86.3 | 95.2 | 96.7 | 97.2 | 98.3 | 100.2 | 102.3 | 105.6 | 109.2 | 113.3 | 118.3 | 118.0 | 152.6 | |
| 2000 | 89.0 | 98.8 | 99.3 | 97.3 | 98.1 | 99.6 | 101.4 | 105.1 | 109.6 | 115.1 | 117.8 | 115.3 | 152.1 | |
| 2500 | 87.6 | 96.2 | 98.4 | 98.2 | 99.3 | 100.2 | 102.3 | 105.7 | 109.2 | 115.3 | 117.7 | 113.7 | 151.6 | |
| 3150 | 89.2 | 98.0 | 98.0 | 98.0 | 98.0 | 100.7 | 102.1 | 106.2 | 110.0 | 114.1 | 116.5 | 113.0 | 151.1 | |
| 4000 | 89.7 | 97.3 | 98.1 | 96.9 | 97.9 | 100.1 | 102.2 | 105.9 | 109.4 | 113.5 | 114.2 | 110.3 | 149.6 | |
| 5000 | 89.7 | 98.3 | 97.9 | 97.6 | 99.2 | 100.5 | 102.7 | 106.1 | 108.9 | 114.3 | 113.4 | 109.5 | 149.9 | |
| 6300 | 87.9 | 98.3 | 99.6 | 98.3 | 98.8 | 101.2 | 102.4 | 105.8 | 108.4 | 113.2 | 112.3 | 109.3 | 149.4 | |
| 8000 | 87.1 | 97.0 | 98.7 | 99.5 | 100.3 | 100.7 | 101.6 | 104.8 | 107.9 | 111.5 | 111.5 | 106.6 | 148.7 | |
| 10000 | 84.5 | 94.8 | 97.2 | 98.2 | 100.3 | 101.9 | 101.1 | 104.4 | 106.5 | 110.5 | 110.2 | 106.2 | 148.3 | |
| 12500 | 82.7 | 94.1 | 96.0 | 96.5 | 99.2 | 100.6 | 100.3 | 102.7 | 104.9 | 108.2 | 108.4 | 103.8 | 147.3 | |
| 16000 | 80.8 | 92.9 | 96.0 | 96.4 | 98.8 | 99.7 | 99.0 | 101.2 | 103.3 | 106.7 | 106.8 | 102.3 | 147.3 | |
| 20000 | 75.4 | 90.5 | 92.6 | 94.0 | 98.0 | 98.0 | 98.3 | 96.7 | 98.4 | 101.1 | 103.5 | 104.3 | 146.5 | |
| 25000 | 74.2 | 87.9 | 89.7 | 90.9 | 95.6 | 96.2 | 93.6 | 93.9 | 97.6 | 98.4 | 101.6 | 95.0 | 145.6 | |
| 31500 | 72.9 | 82.7 | 87.4 | 89.4 | 90.0 | 90.5 | 90.5 | 91.1 | 94.0 | 97.4 | 99.7 | 89.7 | 145.6 | |
| 40000 | 68.8 | 77.7 | 82.5 | 83.8 | 88.2 | 88.9 | 84.7 | 86.8 | 88.6 | 92.8 | 94.1 | 84.6 | 145.2 | |
| 50000 | 62.0 | 72.4 | 75.0 | 77.7 | 80.1 | 80.8 | 79.5 | 79.8 | 84.1 | 86.2 | 88.5 | 79.2 | 143.3 | |
| 63000 | 56.7 | 67.7 | 68.8 | 71.4 | 72.2 | 72.6 | 74.4 | 73.3 | 79.7 | 79.5 | 83.3 | 74.2 | 142.9 | |
| 80000 | 51.5 | 59.5 | 63.8 | 66.0 | 66.4 | 67.0 | 66.8 | 67.4 | 74.5 | 74.2 | 79.4 | 67.2 | 144.7 | |

6ASPL 98.4 108.6 109.8 109.6 111.0 112.5 113.5 116.7 120.4 125.8 128.4 127.7 124.8 163.9

TEST DATE 03-16-78 TAPE NO. N310 ALPHA SB59 TAMB 36.68
LOCATION C41 ANECH CH AERO. RDG. ADH169 PAMB 29.4900 RELHUM 60.00

MODEL TEST POINT ACQUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL SIZE FREE-JET SPEED
0300 0317 0. M/SEC (0. FPS)

07/19/79 17.259

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X03170

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | | | | | | | | | | | | | | |
| 315 | 62.3 | 66.6 | 68.6 | 69.7 | 72.1 | 74.5 | 76.1 | 78.1 | 80.5 | 82.9 | 85.0 | 87.4 | 89.3 | 146.3 |
| 400 | 65.4 | 68.2 | 69.5 | 71.6 | 73.7 | 74.6 | 76.7 | 78.7 | 80.5 | 82.3 | 84.1 | 85.8 | 87.7 | 147.7 |
| 500 | 68.7 | 69.2 | 70.0 | 71.6 | 73.7 | 75.6 | 77.7 | 79.3 | 81.2 | 83.3 | 85.2 | 86.8 | 88.3 | 150.0 |
| 630 | 71.5 | 70.0 | 72.3 | 71.8 | 72.9 | 75.3 | 76.4 | 79.1 | 80.3 | 83.6 | 85.5 | 86.9 | 88.1 | 151.2 |
| 800 | 73.8 | 71.4 | 72.6 | 72.4 | 74.5 | 76.4 | 78.3 | 81.2 | 82.5 | 85.9 | 87.3 | 88.1 | 89.2 | 152.1 |
| 1000 | 79.8 | 71.9 | 74.2 | 74.7 | 75.5 | 77.6 | 79.0 | 82.4 | 83.2 | 86.2 | 87.9 | 88.3 | 89.3 | 152.8 |
| 1250 | 85.4 | 77.7 | 79.0 | 79.0 | 79.9 | 81.0 | 82.3 | 85.5 | 86.5 | 89.5 | 91.4 | 91.8 | 92.8 | 152.8 |
| 1600 | 83.3 | 76.8 | 78.9 | 78.9 | 79.5 | 81.1 | 82.3 | 85.5 | 86.5 | 89.5 | 91.4 | 91.8 | 92.8 | 153.1 |
| 2000 | 86.3 | 75.2 | 76.7 | 77.2 | 78.3 | 80.2 | 81.3 | 84.5 | 85.5 | 88.5 | 90.4 | 90.8 | 91.8 | 152.6 |
| 2500 | 89.0 | 78.8 | 79.3 | 79.3 | 80.1 | 82.1 | 83.1 | 86.1 | 87.1 | 90.1 | 92.0 | 92.4 | 93.4 | 152.1 |
| 3150 | 87.6 | 76.2 | 78.4 | 78.2 | 79.3 | 81.2 | 82.3 | 85.2 | 86.2 | 89.2 | 91.1 | 91.5 | 92.5 | 151.1 |
| 4000 | 89.5 | 77.3 | 78.1 | 78.1 | 79.9 | 81.7 | 82.7 | 85.7 | 86.7 | 89.7 | 91.6 | 92.0 | 93.0 | 149.8 |
| 5000 | 89.7 | 78.3 | 79.9 | 79.6 | 81.2 | 83.0 | 84.1 | 87.0 | 88.0 | 91.0 | 92.9 | 93.3 | 94.3 | 149.9 |
| 6300 | 87.9 | 78.3 | 79.6 | 79.6 | 81.2 | 83.0 | 84.1 | 87.0 | 88.0 | 91.0 | 92.9 | 93.3 | 94.3 | 149.4 |
| 8000 | 87.1 | 77.0 | 78.7 | 78.5 | 80.3 | 82.1 | 83.2 | 86.1 | 87.1 | 90.1 | 92.0 | 92.4 | 93.4 | 148.7 |
| 10000 | 84.5 | 74.8 | 76.2 | 76.2 | 78.0 | 80.0 | 81.1 | 84.0 | 85.0 | 88.0 | 90.0 | 90.4 | 91.4 | 148.3 |
| 12500 | 82.7 | 74.1 | 76.0 | 75.9 | 77.6 | 79.6 | 80.7 | 83.6 | 84.6 | 87.6 | 89.5 | 90.0 | 91.0 | 147.3 |
| 16000 | 80.8 | 72.9 | 74.0 | 73.9 | 75.6 | 77.6 | 78.7 | 81.6 | 82.6 | 85.6 | 87.5 | 88.0 | 89.0 | 147.3 |
| 20000 | 75.4 | 70.5 | 72.6 | 72.6 | 74.0 | 76.0 | 77.1 | 80.0 | 81.0 | 84.0 | 85.9 | 86.3 | 87.3 | 146.5 |
| 25000 | 74.2 | 67.9 | 69.7 | 69.5 | 71.6 | 73.6 | 74.7 | 77.6 | 78.6 | 81.6 | 83.5 | 84.0 | 85.0 | 145.6 |
| 31500 | 72.9 | 62.7 | 64.4 | 64.4 | 66.0 | 68.0 | 69.1 | 72.0 | 73.0 | 76.0 | 77.9 | 78.3 | 79.3 | 145.6 |
| 40000 | 68.8 | 77.7 | 82.5 | 83.8 | 88.2 | 88.9 | 84.7 | 86.8 | 88.8 | 92.8 | 94.1 | 94.6 | 95.2 | 145.2 |
| 50000 | 62.0 | 72.4 | 75.0 | 77.7 | 80.1 | 80.8 | 79.5 | 79.8 | 84.1 | 86.2 | 88.5 | 89.2 | 90.2 | 143.3 |
| 63000 | 56.7 | 67.7 | 68.8 | 71.4 | 72.2 | 72.5 | 74.4 | 73.3 | 79.7 | 79.5 | 83.3 | 74.2 | 74.2 | 142.9 |
| 80000 | 51.5 | 59.5 | 63.8 | 66.0 | 66.4 | 67.0 | 68.8 | 67.4 | 74.5 | 74.2 | 79.4 | 67.2 | 66.1 | 144.7 |
| GASPL | 98.4 | 106.6 | 109.8 | 109.6 | 111.0 | 112.5 | 113.5 | 116.7 | 120.4 | 125.8 | 128.4 | 127.7 | 124.8 | 163.9 |

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-16-78 TAPE NO. N310 ALPHA SB59 TAMB 35.88
 LOCATION C41 ANECH CH AERO. RDG. ADH169 PAMB 29.4900 RELHUM 60.00

MODEL TEST POINT 0317 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

07/19/79 17.289

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FM0DL X03170

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|--------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | | | | | | | | | | | | | | |
| 315 | 62.3 | 66.6 | 68.6 | 69.7 | 72.1 | 74.5 | 76.1 | 79.1 | 105.9 | 110.0 | 113.0 | 112.4 | 146.3 | |
| 400 | 65.4 | 68.2 | 69.5 | 71.6 | 73.7 | 74.6 | 76.7 | 100.9 | 106.0 | 111.6 | 114.6 | 112.7 | 147.7 | |
| 500 | 68.7 | 69.2 | 70.7 | 70.0 | 71.6 | 73.7 | 75.6 | 97.7 | 103.5 | 112.3 | 115.2 | 115.8 | 113.3 | 150.0 |
| 630 | 71.5 | 70.0 | 72.3 | 71.8 | 72.9 | 75.3 | 76.4 | 99.1 | 104.3 | 113.6 | 116.5 | 116.9 | 113.8 | 151.2 |
| 800 | 73.8 | 71.4 | 72.6 | 72.4 | 74.5 | 76.4 | 78.3 | 101.2 | 105.9 | 114.2 | 117.8 | 117.3 | 115.2 | 152.1 |
| 1000 | 79.8 | 71.9 | 74.2 | 74.7 | 75.5 | 77.6 | 79.0 | 102.4 | 108.2 | 116.0 | 117.9 | 118.3 | 115.9 | 152.8 |
| 1250 | 85.4 | 77.7 | 79.0 | 77.0 | 76.9 | 79.0 | 100.6 | 103.3 | 108.5 | 114.3 | 117.9 | 118.4 | 115.8 | 152.8 |
| 1600 | 83.3 | 76.8 | 78.8 | 78.9 | 79.5 | 101.1 | 101.7 | 104.9 | 108.6 | 113.9 | 118.5 | 119.0 | 115.4 | 153.1 |
| 2000 | 86.3 | 75.2 | 76.7 | 77.2 | 78.3 | 100.2 | 102.3 | 105.5 | 109.2 | 113.3 | 118.3 | 118.0 | 114.2 | 152.6 |
| 2500 | 89.0 | 78.8 | 79.3 | 77.3 | 78.1 | 99.6 | 101.4 | 105.1 | 109.8 | 115.1 | 117.8 | 116.3 | 111.3 | 152.1 |
| 3150 | 87.6 | 76.2 | 78.4 | 78.2 | 79.3 | 100.2 | 102.3 | 105.7 | 109.2 | 115.3 | 117.7 | 113.7 | 108.9 | 151.8 |
| 4000 | 89.2 | 78.0 | 78.0 | 78.0 | 78.0 | 100.7 | 102.1 | 105.2 | 110.0 | 114.1 | 116.5 | 113.0 | 108.0 | 151.1 |
| 5000 | 89.5 | 77.3 | 78.1 | 76.9 | 77.9 | 100.1 | 102.2 | 105.9 | 109.4 | 113.5 | 114.2 | 110.3 | 106.8 | 149.8 |
| 6300 | 89.7 | 76.3 | 77.9 | 77.6 | 79.2 | 100.5 | 102.7 | 106.1 | 108.9 | 114.3 | 113.4 | 109.5 | 106.3 | 149.9 |
| 8000 | 87.9 | 76.3 | 79.8 | 78.3 | 78.6 | 101.2 | 102.4 | 105.8 | 108.4 | 113.2 | 112.3 | 109.3 | 105.5 | 149.4 |
| 10000 | 87.1 | 77.0 | 79.5 | 79.5 | 79.5 | 100.3 | 100.7 | 101.5 | 104.8 | 107.9 | 111.5 | 111.5 | 106.6 | 148.7 |
| 12500 | 84.5 | 74.8 | 78.2 | 78.2 | 78.2 | 100.3 | 101.9 | 101.1 | 104.4 | 106.5 | 110.5 | 110.2 | 106.2 | 148.3 |
| 16000 | 82.7 | 74.1 | 76.0 | 76.5 | 79.2 | 100.6 | 100.3 | 102.7 | 104.9 | 108.2 | 108.4 | 103.8 | 101.5 | 147.3 |
| 20000 | 80.8 | 72.9 | 76.0 | 76.4 | 78.8 | 99.7 | 99.0 | 101.2 | 103.3 | 106.7 | 106.8 | 102.3 | 99.7 | 147.3 |
| 25000 | 75.4 | 70.5 | 72.6 | 74.0 | 76.0 | 98.3 | 96.7 | 98.4 | 101.1 | 103.5 | 104.3 | 99.3 | 97.2 | 146.5 |
| 31500 | 74.2 | 67.9 | 69.7 | 69.9 | 70.9 | 95.8 | 96.2 | 93.8 | 93.9 | 97.8 | 98.4 | 101.5 | 95.0 | 145.6 |
| 40000 | 72.9 | 62.7 | 67.4 | 69.4 | 70.0 | 90.5 | 90.5 | 91.1 | 94.0 | 97.4 | 99.7 | 99.7 | 85.7 | 145.6 |
| 50000 | 68.8 | 77.7 | 82.5 | 83.8 | 88.2 | 88.9 | 84.7 | 86.8 | 88.8 | 92.8 | 94.1 | 84.6 | 84.7 | 145.2 |
| 63000 | 62.0 | 72.4 | 75.0 | 77.7 | 80.1 | 80.8 | 79.5 | 79.8 | 84.1 | 86.2 | 86.5 | 79.2 | 79.2 | 143.3 |
| 80000 | 56.7 | 67.7 | 68.8 | 71.4 | 72.2 | 72.5 | 74.4 | 73.3 | 79.7 | 79.5 | 83.3 | 74.2 | 74.2 | 142.9 |
| 100000 | 51.5 | 59.5 | 63.8 | 66.0 | 66.4 | 67.0 | 68.6 | 67.4 | 74.5 | 74.2 | 79.4 | 67.2 | 66.1 | 144.7 |
| GASPL | 98.4 | 108.6 | 109.8 | 109.6 | 111.0 | 112.5 | 113.5 | 116.7 | 120.4 | 125.8 | 128.4 | 127.7 | 124.8 | 163.9 |

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OF POOR QUALITY

| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 0. | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|-------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 03-16-78 | TAPE NO. | N310 | ALPHA | 5859 | TAMS | 36.68 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH169 | PAMB | 29.4900 | RELHUM | 60.00 |

| MODEL | TEST POINT | ACOUSTIC RANGE | 12.2 M (40.0 FT) ARC | 139.0 SQ CM (21.55 SQ IN) - MODEL | 0. | M/SEC (0. FPS) |
|-------|------------|----------------|-----------------------|------------------------------------|----|-----------------|
| 0300 | 0317 | | | | | |

0319

07/19/79 17.289

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X03175

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 47.3 | 69.4 | 72.0 | 72.0 | 74.0 | 76.3 | 78.0 | 79.7 | 84.7 | 92.5 | 93.8 | 92.3 | 86.4 | 169.1 |
| 63 | 50.1 | 70.2 | 73.6 | 73.6 | 75.3 | 77.8 | 78.8 | 81.1 | 85.6 | 93.8 | 95.1 | 93.4 | 86.9 | 169.3 |
| 80 | 52.4 | 71.5 | 73.9 | 74.4 | 76.9 | 78.9 | 80.6 | 83.1 | 87.1 | 94.4 | 96.4 | 93.6 | 88.2 | 170.2 |
| 100 | 58.4 | 72.0 | 75.3 | 76.6 | 77.8 | 80.1 | 81.3 | 84.3 | 89.3 | 95.1 | 96.4 | 94.6 | 88.8 | 170.9 |
| 125 | 63.8 | 77.7 | 80.1 | 78.8 | 79.1 | 81.4 | 82.9 | 85.1 | 89.6 | 94.3 | 96.3 | 94.5 | 88.4 | 170.9 |
| 160 | 61.5 | 76.6 | 79.8 | 80.6 | 81.6 | 83.3 | 83.8 | 86.6 | 89.5 | 93.7 | 96.3 | 94.8 | 87.8 | 171.3 |
| 200 | 64.3 | 74.8 | 77.5 | 78.8 | 80.3 | 82.3 | 84.3 | 87.0 | 90.0 | 92.9 | 96.2 | 93.5 | 86.0 | 170.7 |
| 250 | 66.7 | 78.1 | 79.8 | 78.6 | 79.9 | 81.7 | 83.2 | 86.4 | 90.3 | 94.3 | 95.5 | 90.4 | 82.4 | 170.2 |
| 315 | 64.9 | 75.2 | 78.7 | 79.2 | 80.8 | 81.8 | 83.8 | 86.7 | 89.4 | 94.3 | 95.0 | 88.3 | 79.2 | 169.9 |
| 400 | 65.9 | 76.6 | 77.9 | 78.7 | 79.8 | 82.0 | 83.3 | 87.0 | 89.9 | 92.7 | 93.2 | 86.9 | 77.3 | 169.2 |
| 500 | 65.8 | 75.6 | 77.7 | 77.3 | 78.9 | 81.1 | 83.1 | 86.3 | 88.9 | 91.7 | 90.4 | 83.6 | 75.2 | 167.9 |
| 630 | 65.5 | 76.2 | 77.1 | 77.7 | 79.8 | 81.3 | 83.3 | 86.2 | 88.1 | 92.1 | 89.1 | 82.1 | 73.5 | 168.0 |
| 800 | 63.2 | 75.8 | 78.5 | 78.2 | 79.2 | 81.7 | 82.8 | 85.7 | 87.4 | 90.7 | 87.5 | 81.2 | 71.6 | 167.6 |
| 1000 | 61.9 | 74.2 | 77.4 | 79.2 | 80.5 | 81.1 | 81.7 | 84.5 | 86.6 | 88.7 | 86.3 | 77.8 | 69.6 | 166.8 |
| 1250 | 58.9 | 71.6 | 75.7 | 77.8 | 80.4 | 82.3 | 81.2 | 84.0 | 85.0 | 87.3 | 84.6 | 76.6 | 67.1 | 166.5 |
| 1600 | 56.1 | 70.3 | 74.0 | 75.6 | 79.0 | 80.6 | 80.1 | 81.9 | 82.9 | 84.4 | 81.8 | 72.8 | 62.6 | 165.4 |
| 2000 | 53.3 | 68.5 | 73.6 | 75.4 | 78.4 | 79.7 | 78.8 | 80.1 | 81.0 | 82.3 | 79.2 | 69.8 | 57.9 | 165.4 |
| 2500 | 46.1 | 64.9 | 69.4 | 72.3 | 77.1 | 77.7 | 75.8 | 76.7 | 77.8 | 77.9 | 75.0 | 63.9 | 50.5 | 164.7 |
| 3150 | 41.5 | 59.9 | 64.6 | 67.6 | 73.4 | 74.3 | 71.3 | 70.6 | 72.7 | 70.3 | 68.8 | 54.6 | 40.1 | 163.7 |
| 4000 | 34.0 | 50.0 | 58.5 | 62.8 | 64.8 | 65.7 | 63.2 | 64.6 | 65.1 | 64.6 | 60.8 | 40.4 | 19.1 | 163.9 |
| 5000 | 20.1 | 37.3 | 47.4 | 51.8 | 57.9 | 59.2 | 54.5 | 54.9 | 53.6 | 52.5 | 45.4 | 21.6 | | 163.3 |
| 6300 | | 17.8 | 27.8 | 35.0 | 39.7 | 41.2 | 39.2 | 37.1 | 36.8 | 31.6 | 22.0 | | | 161.4 |
| 8000 | | | 0.2 | 9.4 | 13.7 | 15.2 | 15.9 | 11.3 | 11.1 | 0.2 | | | | 161.0 |
| 10000 | | | | | | | | | | | | | | 162.8 |

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| | | | | | | | | | | | | | | |
|--------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| 03ASPL | 75.0 | 87.0 | 89.6 | 90.1 | 91.8 | 93.6 | 94.6 | 97.4 | 100.4 | 104.8 | 106.0 | 103.0 | 96.4 | 161.8 |
| PNL | 79.7 | 92.5 | 96.3 | 97.7 | 100.6 | 101.6 | 101.7 | 103.7 | 106.0 | 109.3 | 109.3 | 104.4 | 96.4 | |
| PNLT | 80.4 | 93.1 | 95.3 | 97.7 | 101.8 | 103.1 | 101.7 | 103.7 | 106.0 | 109.5 | 109.3 | 104.4 | 97.6 | |

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-16-78 TAPE NO. N310 ALPHA 3859 TAMS 36.88
 LOCATION C41 ANECH CH AERO. RDG. ADH169 PAMB 29.4900 RELH'M 60.00

MODEL TEST POINT 0317 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 0. FREE-JET SPEED M/SEC (0. FPS)

07/19/79 17.200

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X03180
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. FNL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

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TEST DATE 03-16-78 TAPE NO. N310 ALPHA 5859 TAMB 41.72
LOCATION C41 ANECH CH AERO. RDG. ADH85 PAMB 29.4550 RELNUM 31.20

MODEL TEST POINT 0318 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 139.0 SQ CM (21.55 SQ IN) - MODEL 114.91 M/SEC (377.0 FPS) FREE-JET SPEED

07/19/79 17.269

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X03180

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 76.3 | 90.4 | 89.3 | 88.8 | 87.9 | 86.9 | 87.5 | 88.1 | 92.8 | 99.3 | 103.2 | 108.6 | 105.7 | 139.8 |
| 315 | 76.3 | 90.4 | 89.3 | 88.8 | 87.9 | 86.9 | 87.5 | 88.1 | 92.8 | 99.3 | 103.2 | 108.6 | 105.7 | 139.8 |
| 400 | 77.1 | 91.6 | 91.0 | 89.1 | 89.7 | 89.8 | 89.5 | 91.3 | 96.7 | 106.9 | 110.3 | 110.8 | 105.7 | 144.7 |
| 500 | 77.1 | 92.4 | 91.9 | 90.2 | 91.4 | 90.7 | 91.2 | 92.2 | 99.1 | 107.5 | 111.3 | 110.0 | 104.3 | 145.1 |
| 630 | 77.1 | 93.1 | 93.5 | 91.6 | 95.8 | 92.2 | 92.0 | 94.7 | 101.7 | 108.4 | 111.9 | 103.5 | 104.8 | 145.7 |
| 800 | 77.1 | 94.5 | 94.6 | 92.7 | 93.2 | 93.3 | 93.6 | 95.8 | 102.6 | 109.7 | 111.8 | 106.2 | 106.0 | 145.9 |
| 1000 | 82.4 | 94.0 | 95.2 | 94.3 | 94.1 | 94.5 | 94.8 | 97.2 | 103.3 | 108.6 | 111.9 | 106.8 | 104.7 | 145.6 |
| 1250 | 85.3 | 95.4 | 96.9 | 95.0 | 95.9 | 96.3 | 95.8 | 98.4 | 104.5 | 108.7 | 110.7 | 106.3 | 104.6 | 145.4 |
| 1600 | 86.6 | 98.0 | 98.3 | 96.4 | 96.2 | 96.7 | 97.1 | 99.6 | 105.3 | 109.1 | 109.8 | 105.5 | 105.3 | 145.5 |
| 2000 | 89.0 | 96.7 | 97.3 | 96.2 | 95.5 | 96.2 | 97.0 | 99.9 | 105.7 | 110.2 | 110.2 | 106.4 | 106.5 | 146.1 |
| 2500 | 89.3 | 97.4 | 97.5 | 96.2 | 96.6 | 97.2 | 98.7 | 101.2 | 107.0 | 109.9 | 110.7 | 106.6 | 107.3 | 146.5 |
| 3150 | 91.0 | 97.9 | 98.0 | 97.0 | 97.7 | 98.4 | 98.7 | 102.0 | 106.7 | 110.4 | 111.1 | 107.2 | 106.4 | 146.9 |
| 4000 | 93.8 | 99.2 | 98.0 | 97.5 | 97.3 | 98.3 | 99.1 | 102.6 | 106.9 | 110.9 | 109.7 | 106.4 | 106.6 | 146.9 |
| 5000 | 92.8 | 97.6 | 97.9 | 97.1 | 98.2 | 98.6 | 100.4 | 103.3 | 106.7 | 110.1 | 108.5 | 105.0 | 105.3 | 146.5 |
| 6300 | 96.2 | 100.9 | 99.4 | 97.9 | 99.2 | 100.6 | 99.8 | 102.7 | 106.2 | 108.9 | 106.5 | 103.6 | 104.6 | 146.0 |
| 8000 | 95.4 | 102.2 | 102.7 | 99.8 | 101.1 | 100.3 | 99.4 | 102.1 | 105.4 | 107.8 | 105.3 | 103.1 | 104.3 | 146.1 |
| 10000 | 95.1 | 102.2 | 102.5 | 101.9 | 102.9 | 102.3 | 99.5 | 101.5 | 104.1 | 106.3 | 103.9 | 102.1 | 104.4 | 146.4 |
| 12500 | 95.2 | 101.8 | 103.4 | 102.8 | 101.8 | 101.2 | 99.8 | 100.7 | 103.6 | 105.9 | 103.0 | 103.0 | 105.3 | 147.0 |
| 16000 | 93.3 | 100.0 | 100.3 | 99.9 | 101.3 | 101.4 | 99.2 | 100.0 | 102.2 | 103.4 | 100.8 | 101.0 | 103.5 | 146.7 |
| 20000 | 91.8 | 99.3 | 100.4 | 99.2 | 101.1 | 100.2 | 98.8 | 98.6 | 98.6 | 97.3 | 94.7 | 95.9 | 100.7 | 146.4 |
| 25000 | 86.0 | 95.6 | 96.4 | 97.2 | 98.7 | 98.1 | 93.7 | 92.9 | 98.8 | 98.6 | 96.9 | 94.8 | 99.1 | 146.8 |
| 31500 | 83.8 | 91.7 | 92.7 | 92.0 | 93.2 | 93.0 | 91.4 | 91.6 | 95.0 | 94.7 | 92.7 | 90.5 | 95.0 | 145.8 |
| 40000 | 81.3 | 86.5 | 89.4 | 90.0 | 91.0 | 90.5 | 86.1 | 86.8 | 89.5 | 86.8 | 85.5 | 84.3 | 88.5 | 145.5 |
| 50000 | 76.2 | 81.2 | 83.7 | 84.2 | 83.1 | 83.1 | 81.3 | 79.7 | 85.1 | 80.9 | 79.8 | 78.8 | 83.4 | 143.8 |
| 63000 | 68.3 | 74.8 | 75.4 | 76.6 | 74.9 | 74.8 | 75.5 | 73.0 | 79.6 | 76.2 | 76.1 | 72.7 | 78.2 | 142.5 |
| 80000 | 60.8 | 67.4 | 67.7 | 68.5 | 67.8 | 68.8 | 67.0 | 66.8 | 69.8 | 66.4 | 66.2 | 62.9 | 68.4 | 141.1 |
| GASPL | 104.3 | 111.4 | 111.8 | 110.7 | 111.5 | 111.4 | 110.5 | 112.9 | 117.2 | 121.3 | 122.2 | 119.9 | 118.4 | 159.8 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 377.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 03-16-78 | TAPE NO. | N310 | ALPHA | SB59 | TAMB | 41.72 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH165 | PAMB | 29.4550 | RELHUM | 31.20 |

| MODEL | TEST POINT | ACOUSTIC RANGE | ARC | 139.0 SQ CM | SIZE | 21.55 SQ IN | MODEL | 114.91 M/SEC | FREE-JET SPEED |
|-------|------------|----------------|------------|-------------|-------------|----------------|---------|--------------|----------------|
| 0300 | 0318 | 12.2 M | (40.0 FT) | ARC | 139.0 SQ CM | (21.55 SQ IN) | - MODEL | 114.91 M/SEC | (377.0 FPS) |

07/19/79 17.289

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X03185

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 55.8 | 71.8 | 72.3 | 71.1 | 72.1 | 72.4 | 71.9 | 73.3 | 78.0 | 87.1 | 89.0 | 87.3 | 78.8 | 162.9 |
| 63 | 55.7 | 72.6 | 73.2 | 72.2 | 73.8 | 73.3 | 73.5 | 74.2 | 80.3 | 87.7 | 90.0 | 86.4 | 77.4 | 163.2 |
| 80 | 55.7 | 73.2 | 74.7 | 73.5 | 78.2 | 74.7 | 74.3 | 76.7 | 82.9 | 88.5 | 90.5 | 85.8 | 77.8 | 163.8 |
| 100 | 55.6 | 74.5 | 75.8 | 74.6 | 75.5 | 75.6 | 75.9 | 77.7 | 83.8 | 89.7 | 90.4 | 84.5 | 78.8 | 164.0 |
| 125 | 60.8 | 74.0 | 76.3 | 76.1 | 76.4 | 76.9 | 77.0 | 79.0 | 84.4 | 88.6 | 90.4 | 82.9 | 77.3 | 163.7 |
| 160 | 63.5 | 75.2 | 77.8 | 76.7 | 78.0 | 78.6 | 77.9 | 80.1 | 85.4 | 88.6 | 88.9 | 82.2 | 76.9 | 163.5 |
| 200 | 64.6 | 77.7 | 79.1 | 78.0 | 78.1 | 78.8 | 79.1 | 81.1 | 86.1 | 88.8 | 87.8 | 81.0 | 77.1 | 163.6 |
| 250 | 66.7 | 75.1 | 77.8 | 77.5 | 77.2 | 78.1 | 78.8 | 81.2 | 86.2 | 89.6 | 87.9 | 81.5 | 77.6 | 164.2 |
| 315 | 66.5 | 76.4 | 77.7 | 77.2 | 76.1 | 78.8 | 80.2 | 82.2 | 87.3 | 88.9 | 87.9 | 81.2 | 77.6 | 164.6 |
| 400 | 67.7 | 76.5 | 77.9 | 77.7 | 76.9 | 79.8 | 79.9 | 82.7 | 86.6 | 89.0 | 87.8 | 81.1 | 75.7 | 165.0 |
| 500 | 70.0 | 77.5 | 77.5 | 78.0 | 78.2 | 79.4 | 80.0 | 83.1 | 86.4 | 89.1 | 85.9 | 79.7 | 74.9 | 165.0 |
| 630 | 68.5 | 75.4 | 77.2 | 77.3 | 78.9 | 80.4 | 81.1 | 83.5 | 85.9 | 88.0 | 84.2 | 77.6 | 72.6 | 164.6 |
| 800 | 71.4 | 78.4 | 78.3 | 77.8 | 79.6 | 81.2 | 80.3 | 82.6 | 85.1 | 86.4 | 81.3 | 75.5 | 70.7 | 164.1 |
| 1000 | 70.3 | 79.4 | 81.4 | 79.5 | 81.3 | 80.7 | 79.8 | 81.8 | 84.1 | 84.9 | 80.1 | 74.3 | 69.3 | 164.2 |
| 1250 | 69.4 | 79.0 | 81.4 | 81.4 | 83.1 | 82.7 | 79.6 | 81.0 | 82.5 | 83.1 | 78.2 | 72.5 | 67.9 | 164.5 |
| 1600 | 68.6 | 78.1 | 81.4 | 82.0 | 81.7 | 81.3 | 79.7 | 79.9 | 81.6 | 82.2 | 76.4 | 72.1 | 66.4 | 165.2 |
| 2000 | 65.8 | 75.7 | 78.0 | 78.9 | 81.0 | 81.3 | 78.9 | 78.9 | 79.8 | 79.1 | 73.3 | 68.4 | 61.8 | 164.8 |
| 2500 | 62.5 | 73.7 | 77.1 | 77.5 | 80.2 | 79.6 | 75.9 | 76.9 | 75.4 | 71.7 | 65.4 | 60.5 | 54.0 | 164.5 |
| 3150 | 53.3 | 67.6 | 71.3 | 73.9 | 76.5 | 76.2 | 71.5 | 69.6 | 73.7 | 70.6 | 64.2 | 64.5 | 44.0 | 164.9 |
| 4000 | 44.9 | 59.0 | 63.8 | 65.5 | 68.0 | 68.2 | 68.2 | 64.9 | 66.1 | 61.9 | 53.8 | 41.3 | 25.4 | 163.9 |
| 5000 | 32.6 | 46.2 | 54.2 | 58.0 | 60.8 | 60.8 | 55.8 | 54.8 | 54.3 | 48.5 | 36.8 | 21.3 | | 163.6 |
| 6300 | 9.7 | 26.6 | 36.5 | 41.4 | 42.8 | 43.6 | 41.0 | 36.9 | 37.9 | 28.3 | 13.3 | | | 161.9 |
| 8000 | | | 6.9 | 14.6 | 16.5 | 17.5 | 17.0 | 11.0 | 11.1 | | | | | 160.7 |
| 10000 | | | | | | | | | | | | | | 159.2 |

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|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| GASPL | 79.4 | 88.9 | 90.7 | 90.5 | 91.8 | 92.0 | 91.2 | 93.2 | 96.9 | 100.0 | 99.7 | 94.4 | 88.2 | 177.7 |
| PNL | 87.0 | 97.3 | 100.0 | 100.3 | 102.1 | 102.0 | 100.1 | 101.0 | 103.5 | 105.1 | 103.0 | 96.7 | 91.1 | |
| PNLT | 88.2 | 97.3 | 100.6 | 101.3 | 103.3 | 103.1 | 100.6 | 101.0 | 104.0 | 105.1 | 104.0 | 96.7 | 91.1 | |

DIAMETER RATIO 8.061 FREQUENCY SHIFT -9

TEST DATE 03-16-76 TAPE NO. N310 ALPHA SB59 TAMB 41.72
LOCATION C41 ANECH CH AERO. RDG. ADH185 PAMB 29.4550 RELHUM 31.20

MODEL TEST POINT 0300 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 114.91 M/SEC (377.0 FPS) FREE-JET SPEED

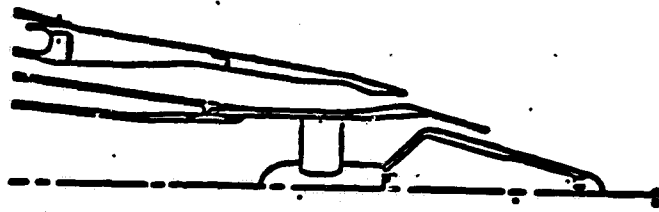
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6.1.5 Measured Acoustic Data for Model 4

$R_r^o = 0.853$. . . conic outer nozzle

$R_r^o = 0.805$. . . conic inner nozzle

$A^i/A^o = 0.526$
without struts in outer flow



07/19/79 17.710

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 86 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FM0DL X04010
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. 170. 180. 190. 200. 210. 220. 230. 240. 250. 260. 270. 280. 290. 300. 315. 330. 345. 360. 375. 390. 405. 420. 435. 450. 465. 480. 495. 510. 525. 540. 555. 570. 585. 600. 615. 630. 645. 660. 675. 690. 705. 720. 735. 750. 765. 780. 795. 810. 825. 840. 855. 870. 885. 900. 915. 930. 945. 960. 975. 990. 1005. 1020. 1035. 1050. 1065. 1080. 1095. 1110. 1125. 1140. 1155. 1170. 1185. 1200. 1215. 1230. 1245. 1260. 1275. 1290. 1305. 1320. 1335. 1350. 1365. 1380. 1395. 1410. 1425. 1440. 1455. 1470. 1485. 1500. 1515. 1530. 1545. 1560. 1575. 1590. 1605. 1620. 1635. 1650. 1665. 1680. 1695. 1710. 1725. 1740. 1755. 1770. 1785. 1800. 1815. 1830. 1845. 1860. 1875. 1890. 1905. 1920. 1935. 1950. 1965. 1980. 1995. 2010. 2025. 2040. 2055. 2070. 2085. 2100. 2115. 2130. 2145. 2160. 2175. 2190. 2205. 2220. 2235. 2250. 2265. 2280. 2295. 2310. 2325. 2340. 2355. 2370. 2385. 2400. 2415. 2430. 2445. 2460. 2475. 2490. 2505. 2520. 2535. 2550. 2565. 2580. 2595. 2610. 2625. 2640. 2655. 2670. 2685. 2700. 2715. 2730. 2745. 2760. 2775. 2790. 2805. 2820. 2835. 2850. 2865. 2880. 2895. 2910. 2925. 2940. 2955. 2970. 2985. 3000. 3015. 3030. 3045. 3060. 3075. 3090. 3105. 3120. 3135. 3150. 3165. 3180. 3195. 3210. 3225. 3240. 3255. 3270. 3285. 3300. 3315. 3330. 3345. 3360. 3375. 3390. 3405. 3420. 3435. 3450. 3465. 3480. 3495. 3510. 3525. 3540. 3555. 3570. 3585. 3600. 3615. 3630. 3645. 3660. 3675. 3690. 3705. 3720. 3735. 3750. 3765. 3780. 3795. 3810. 3825. 3840. 3855. 3870. 3885. 3900. 3915. 3930. 3945. 3960. 3975. 3990. 4005. 4020. 4035. 4050. 4065. 4080. 4095. 4110. 4125. 4140. 4155. 4170. 4185. 4200. 4215. 4230. 4245. 4260. 4275. 4290. 4305. 4320. 4335. 4350. 4365. 4380. 4395. 4410. 4425. 4440. 4455. 4470. 4485. 4500. 4515. 4530. 4545. 4560. 4575. 4590. 4605. 4620. 4635. 4650. 4665. 4680. 4695. 4710. 4725. 4740. 4755. 4770. 4785. 4800. 4815. 4830. 4845. 4860. 4875. 4890. 4905. 4920. 4935. 4950. 4965. 4980. 4995. 5010. 5025. 5040. 5055. 5070. 5085. 5100. 5115. 5130. 5145. 5160. 5175. 5190. 5205. 5220. 5235. 5250. 5265. 5280. 5295. 5310. 5325. 5340. 5355. 5370. 5385. 5400. 5415. 5430. 5445. 5460. 5475. 5490. 5505. 5520. 5535. 5550. 5565. 5580. 5595. 5610. 5625. 5640. 5655. 5670. 5685. 5700. 5715. 5730. 5745. 5760. 5775. 5790. 5805. 5820. 5835. 5850. 5865. 5880. 5895. 5910. 5925. 5940. 5955. 5970. 5985. 6000. 6015. 6030. 6045. 6060. 6075. 6090. 6105. 6120. 6135. 6150. 6165. 6180. 6195. 6210. 6225. 6240. 6255. 6270. 6285. 6300. 6315. 6330. 6345. 6360. 6375. 6390. 6405. 6420. 6435. 6450. 6465. 6480. 6495. 6510. 6525. 6540. 6555. 6570. 6585. 6600. 6615. 6630. 6645. 6660. 6675. 6690. 6705. 6720. 6735. 6750. 6765. 6780. 6795. 6810. 6825. 6840. 6855. 6870. 6885. 6900. 6915. 6930. 6945. 6960. 6975. 6990. 7005. 7020. 7035. 7050. 7065. 7080. 7095. 7110. 7125. 7140. 7155. 7170. 7185. 7200. 7215. 7230. 7245. 7260. 7275. 7290. 7305. 7320. 7335. 7350. 7365. 7380. 7395. 7410. 7425. 7440. 7455. 7470. 7485. 7500. 7515. 7530. 7545. 7560. 7575. 7590. 7605. 7620. 7635. 7650. 7665. 7680. 7695. 7710. 7725. 7740. 7755. 7770. 7785. 7800. 7815. 7830. 7845. 7860. 7875. 7890. 7905. 7920. 7935. 7950. 7965. 7980. 7995. 8010. 8025. 8040. 8055. 8070. 8085. 8100. 8115. 8130. 8145. 8160. 8175. 8190. 8205. 8220. 8235. 8250. 8265. 8280. 8295. 8310. 8325. 8340. 8355. 8370. 8385. 8400. 8415. 8430. 8445. 8460. 8475. 8490. 8505. 8520. 8535. 8550. 8565. 8580. 8595. 8610. 8625. 8640. 8655. 8670. 8685. 8700. 8715. 8730. 8745. 8760. 8775. 8790. 8805. 8820. 8835. 8850. 8865. 8880. 8895. 8910. 8925. 8940. 8955. 8970. 8985. 9000. 9015. 9030. 9045. 9060. 9075. 9090. 9105. 9120. 9135. 9150. 9165. 9180. 9195. 9210. 9225. 9240. 9255. 9270. 9285. 9300. 9315. 9330. 9345. 9360. 9375. 9390. 9405. 9420. 9435. 9450. 9465. 9480. 9495. 9510. 9525. 9540. 9555. 9570. 9585. 9600. 9615. 9630. 9645. 9660. 9675. 9690. 9705. 9720. 9735. 9750. 9765. 9780. 9795. 9810. 9825. 9840. 9855. 9870. 9885. 9900. 9915. 9930. 9945. 9960. 9975. 9990. 10005. 10020. 10035. 10050. 10065. 10080. 10095. 10110. 10125. 10140. 10155. 10170. 10185. 10200. 10215. 10230. 10245. 10260. 10275. 10290. 10305. 10320. 10335. 10350. 10365. 10380. 10395. 10410. 10425. 10440. 10455. 10470. 10485. 10500. 10515. 10530. 10545. 10560. 10575. 10590. 10605. 10620. 10635. 10650. 10665. 10680. 10695. 10710. 10725. 10740. 10755. 10770. 10785. 10800. 10815. 10830. 10845. 10860. 10875. 10890. 10905. 10920. 10935. 10950. 10965. 10980. 11000. 11020. 11040. 11060. 11080. 11100. 11120. 11140. 11160. 11180. 11200. 11220. 11240. 11260. 11280. 11300. 11320. 11340. 11360. 11380. 11400. 11420. 11440. 11460. 11480. 11500. 11520. 11540. 11560. 11580. 11600. 11620. 11640. 11660. 11680. 11700. 11720. 11740. 11760. 11780. 11800. 11820. 11840. 11860. 11880. 11900. 11920. 11940. 11960. 11980. 12000. 12020. 12040. 12060. 12080. 12100. 12120. 12140. 12160. 12180. 12200. 12220. 12240. 12260. 12280. 12300. 12320. 12340. 12360. 12380. 12400. 12420. 12440. 12460. 12480. 12500. 12520. 12540. 12560. 12580. 12600. 12620. 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15500. 15520. 15540. 15560. 15580. 15600. 15620. 15640. 15660. 15680. 15700. 15720. 15740. 15760. 15780. 15800. 15820. 15840. 15860. 15880. 15900. 15920. 15940. 15960. 15980. 16000. 16020. 16040. 16060. 16080. 16100. 16120. 16140. 16160. 16180. 16200. 16220. 16240. 16260. 16280. 16300. 16320. 16340. 16360. 16380. 16400. 16420. 16440. 16460. 16480. 16500. 16520. 16540. 16560. 16580. 16600. 16620. 16640. 16660. 16680. 16700. 16720. 16740. 16760. 16780. 16800. 16820. 16840. 16860. 16880. 16900. 16920. 16940. 16960. 16980. 17000. 17020. 17040. 17060. 17080. 17100. 17120. 17140. 17160. 17180. 17200. 17220. 17240. 17260. 17280. 17300. 17320. 17340. 17360. 17380. 17400. 17420. 17440. 17460. 17480. 17500. 17520. 17540. 17560. 17580. 17600. 17620. 17640. 17660. 17680. 17700. 17720. 17740. 17760. 17780. 17800. 17820. 17840. 17860. 17880. 17900. 17920. 17940. 17960. 17980. 18000. 18020. 18040. 18060. 18080. 18100. 18120. 18140. 18160. 18180. 18200. 18220. 18240. 18260. 18280. 18300. 18320. 18340. 18360. 18380. 18400. 18420. 18440. 18460. 18480. 18500. 18520. 18540. 18560. 18580. 18600. 18620. 18640. 18660. 18680. 18700. 18720. 18740. 18760. 18780. 18800. 18820. 18840. 18860. 18880. 18900. 18920. 18940. 18960. 18980. 19000. 19020. 19040. 19060. 19080. 19100. 19120. 19140. 19160. 19180. 19200. 19220. 19240. 19260. 19280. 19300. 19320. 19340. 19360. 19380. 19400. 19420. 19440. 19460. 19480. 19500. 19520. 19540. 19560. 19580. 19600. 19620. 19640. 19660. 19680. 19700. 19720. 19740. 19760. 19780. 19800. 19820. 19840. 19860. 19880. 19900. 19920. 19940. 19960. 19980. 20000. 20020. 20040. 20060. 20080. 20100. 20120. 20140. 20160. 20180. 20200. 20220. 20240. 20260. 20280. 20300. 20320. 20340. 20360. 20380. 20400. 20420. 20440. 20460. 20480. 20500. 20520. 20540. 20560. 20580. 20600. 20620. 20640. 20660. 20680. 20700. 20720. 20740. 20760. 20780. 20800. 20820. 20840. 20860. 20880. 20900. 20920. 20940. 20960. 20980. 21000. 21020. 21040. 21060. 21080. 21100. 21120. 21140. 21160. 21180. 21200. 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29800. 29820. 29840. 29860. 29880. 29900. 29920. 29940. 29960. 29980. 30000. 30020. 30040. 30060. 30080. 30100. 30120. 30140. 30160. 30180. 30200. 30220. 30240. 30260. 30280. 30300. 30320. 30340. 30360. 30380. 30400. 30420. 30440. 30460. 30480. 30500. 30520. 30540. 30560. 30580. 30600. 30620. 30640. 30660. 30680. 30700. 30720. 30740. 30760. 30780. 30800. 30820. 30840. 30860. 30880. 30900. 30920. 30940. 30960. 30980. 31000. 31020. 31040. 31060. 31080. 31100. 31120. 31140. 31160. 31180. 31200. 31220. 31240. 31260. 31280. 31300. 31320. 31340. 31360. 31380. 31400. 31420. 31440. 31460. 31480. 31500. 31520. 31540. 31560. 31580. 31600. 31620. 31640. 31660. 31680. 31700. 31720. 31740. 31760. 31780. 31800. 31820. 31840. 31860. 31880. 31900. 31920. 31940. 31960. 31980. 32000. 32020. 32040. 32060. 32080. 32100. 32120. 32140. 32160. 32180. 32200. 32220. 32240. 32260. 32280. 32300. 32320. 32340. 32360. 32380. 32400. 32420. 32440. 32460. 32480. 32500. 32520. 32540. 32560. 32580. 32600. 32620. 32640. 32660. 32680. 32700. 32720. 32740. 32760. 32780. 32800. 32820. 32840. 32860. 32880. 32900. 32920. 32940. 32960. 32

07/19/79 17.710

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X04010

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PVL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

107.9

109.5

110.4

112.5

113.6

116.4

120.4

127.1

126.5

127.4

124.4

163.9

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MODEL/FULL SIZE SCALE FACTOR
INPUT 1.000 CALC. 1.000

FREE JET VELOCITY (FT/SEC)
FREE JET DIAMETER (IN)

REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

TEST DATE 03-10-78 TAPE NO. N301 ALPHA 5859 TAMB 39.50
LOCATION C41 ANECH CH AERO. RDG. ADH159 PAMB 29.4900 RELHUM 28.00

MODEL TEST POINT 0401 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 177.7 SQ CH (27.05 SQ IN) - MODEL SIZE 0. FREE-JET SPEED M/SEC (0. FPS)

07/19/72 17.710

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 88 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMOOL X04015

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | FML |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 68.3 | 68.8 | 71.2 | 71.4 | 73.4 | 75.8 | 77.2 | 78.7 | 83.7 | 92.4 | 92.6 | 91.8 | 85.6 | 167.5 |
| 63 | 67.1 | 69.4 | 72.5 | 73.2 | 74.3 | 76.8 | 78.0 | 79.5 | 84.7 | 94.0 | 94.8 | 92.3 | 85.9 | 168.8 |
| 80 | 67.4 | 71.0 | 73.8 | 74.3 | 77.1 | 78.1 | 79.6 | 81.8 | 86.6 | 94.3 | 95.6 | 92.6 | 87.1 | 169.5 |
| 100 | 71.8 | 71.2 | 74.8 | 75.8 | 77.1 | 79.3 | 80.6 | 83.8 | 87.8 | 95.8 | 96.1 | 93.8 | 87.2 | 170.5 |
| 125 | 77.1 | 78.2 | 80.8 | 78.3 | 78.3 | 80.6 | 82.1 | 84.3 | 89.1 | 95.5 | 95.3 | 93.5 | 86.9 | 170.4 |
| 160 | 72.0 | 75.1 | 79.3 | 80.6 | 81.8 | 83.1 | 83.3 | 85.3 | 88.8 | 95.5 | 96.2 | 92.6 | 85.5 | 170.6 |
| 200 | 73.1 | 73.6 | 76.5 | 77.8 | 79.3 | 81.6 | 83.3 | 85.8 | 89.3 | 94.5 | 96.0 | 91.3 | 83.8 | 170.2 |
| 250 | 74.5 | 77.2 | 78.4 | 78.2 | 78.5 | 80.5 | 82.5 | 85.4 | 89.7 | 94.8 | 94.3 | 89.2 | 80.7 | 169.5 |
| 315 | 72.0 | 74.3 | 77.8 | 78.1 | 78.9 | 81.2 | 82.8 | 85.1 | 88.8 | 94.7 | 93.1 | 88.9 | 77.8 | 169.0 |
| 400 | 72.3 | 75.0 | 76.6 | 77.4 | 78.4 | 81.4 | 82.7 | 85.9 | 89.1 | 92.9 | 91.2 | 85.0 | 75.7 | 168.1 |
| 500 | 71.5 | 73.0 | 75.9 | 76.2 | 77.6 | 80.3 | 82.0 | 85.0 | 87.9 | 91.5 | 89.4 | 82.5 | 73.6 | 167.1 |
| 630 | 69.9 | 72.4 | 75.3 | 76.4 | 77.7 | 80.2 | 82.0 | 84.9 | 86.8 | 90.8 | 88.1 | 80.8 | 70.9 | 166.7 |
| 800 | 67.5 | 72.4 | 75.9 | 76.0 | 77.3 | 80.6 | 81.6 | 84.0 | 86.2 | 89.3 | 85.8 | 79.5 | 69.8 | 168.0 |
| 1000 | 66.8 | 71.6 | 74.5 | 76.3 | 77.6 | 79.7 | 80.8 | 82.9 | 84.7 | 87.3 | 83.9 | 77.7 | 67.7 | 165.1 |
| 1250 | 63.5 | 68.9 | 74.2 | 75.6 | 78.0 | 80.4 | 80.1 | 82.0 | 83.3 | 85.8 | 81.6 | 75.7 | 64.7 | 164.6 |
| 1600 | 59.7 | 67.0 | 71.4 | 73.9 | 76.5 | 78.9 | 78.9 | 79.6 | 80.1 | 82.4 | 78.3 | 71.9 | 39.7 | 163.1 |
| 2000 | 56.0 | 64.0 | 69.9 | 72.2 | 76.1 | 78.1 | 77.0 | 77.7 | 78.0 | 80.2 | 75.5 | 68.4 | 55.6 | 162.9 |
| 2500 | 49.8 | 60.5 | 65.8 | 69.4 | 74.9 | 75.9 | 73.5 | 74.2 | 74.3 | 75.1 | 70.4 | 62.3 | 47.4 | 161.6 |
| 3150 | 44.2 | 54.5 | 60.5 | 63.4 | 69.7 | 71.2 | 68.7 | 67.9 | 69.6 | 68.2 | 63.8 | 53.0 | 36.8 | 160.4 |
| 4000 | 36.0 | 45.4 | 54.2 | 59.2 | 61.2 | 62.7 | 62.2 | 61.9 | 62.5 | 61.3 | 54.1 | 39.1 | 16.3 | 160.0 |
| 5000 | 21.5 | 32.4 | 42.4 | 48.0 | 54.5 | 56.2 | 52.3 | 51.3 | 51.2 | 48.2 | 39.2 | 20.5 | 159.5 | |
| 6300 | | 19.3 | 23.7 | 30.3 | 35.9 | 38.5 | 36.9 | 34.2 | 34.3 | 28.0 | 15.3 | | 156.9 | |
| 8000 | | | | 5.2 | 9.9 | 12.7 | 13.3 | 7.9 | 8.0 | | | | 158.2 | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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045PL 83.3 85.7 88.5 88.9 90.4 92.6 93.6 96.0 99.4 105.2 105.1 101.7 95.0 180.8
PWL 86.7 90.4 93.6 95.5 98.2 100.4 100.3 102.0 104.7 109.1 107.8 102.8 94.5
PWL 87.6 91.2 94.4 95.5 98.5 101.6 100.3 102.5 105.2 109.1 108.8 102.8 95.6

DIAMETER RATIO 7.129 FREQUENCY SHIFT -9

TEST DATE 03-10-78 TAPE NO. N301 ALPHA 2859 TAMB 99.50
LOCATION C41 ANECH CH AERO. RDG. ADH159 PAMB 28.4900 RELHUM 28.00

MODEL TEST POINT 0401 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 0. FREE-JET SPEED M/SEC (0. FPS)

07/19/79 17.710

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X04020
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. FNL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

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TEST DATE 03-10-78 TAPE NO. N301 ALPHA 3859 TAMB 33.50
LOCATION C41 ANECH CH AERO. RDG. ADH166 PAMB 29.2700 RELHUM 59.80

MODEL TEST POINT Q402 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 177.7 SQ CM (27.55 SQ IN) - MODEL 117.96 M/SEC (367.0 FPS) FREE-JET SPEED

32
88

07/19/79 17.710

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X04020

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

| | | | | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 50 | 50.7 | 50.7 | 50.9 | 50.7 | 50.7 | 50.8 | 50.6 | 50.0 | 50.5 | 50.6 | 50.1 | 50.1 | 50.3 | 50.7 | 50.0 | 50.4 | 50.2 |
| 60 | 50.7 | 50.7 | 50.9 | 50.7 | 50.7 | 50.8 | 50.6 | 50.5 | 50.3 | 50.0 | 50.6 | 50.1 | 50.5 | 50.7 | 50.6 | 50.9 | 50.3 |
| 70 | 50.2 | 50.7 | 50.9 | 50.3 | 50.0 | 50.9 | 50.0 | 50.9 | 50.6 | 50.0 | 50.6 | 50.1 | 50.5 | 50.7 | 50.9 | 50.3 | 50.2 |
| 80 | 50.8 | 50.7 | 50.9 | 50.7 | 50.7 | 50.7 | 50.7 | 50.7 | 50.7 | 50.7 | 50.7 | 50.7 | 50.7 | 50.7 | 50.7 | 50.7 | 50.7 |
| 90 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 100 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 125 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 160 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 200 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 250 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 315 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 400 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 500 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 630 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 800 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 1000 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 1250 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 1600 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 2000 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 2500 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 3150 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 4000 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 5000 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 6300 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 8000 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 10000 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 12500 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 16000 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 20000 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 25000 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 31500 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 40000 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 50000 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 63000 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |
| 80000 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 | 50.6 |

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QASPL 111.3 111.1 112.1 111.2 112.3 112.2 111.5 113.2 117.5 123.1 123.5 119.8 118.7 160.8

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 387.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 46.00 TURBULANCE CORRECTION - YES

TEST DATE 03-10-78 TAPE NO. N301 ALPHA 3859 TAMB 33.50
LOCATION C41 ANECH CH AERG. RDG. ADH166 PAMB 29.2700 RELHUM 59.80

MODEL TEST POINT 0402 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 177.7 SQ CM (27.55 SQ IN) - MODEL 117.96 M/SEC (387.0 FPS)
FREE-JET SPEED

07/19/79 17.710

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X04025

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 67.9 | 69.8 | 71.1 | 70.2 | 71.4 | 72.4 | 71.9 | 72.4 | 77.7 | 86.9 | 87.5 | 84.1 | 75.4 | 161.2 |
| 63 | 69.4 | 70.8 | 71.9 | 70.6 | 73.0 | 73.5 | 73.3 | 73.3 | 79.9 | 86.1 | 89.3 | 83.9 | 74.0 | 162.4 |
| 80 | 70.1 | 71.2 | 73.0 | 72.5 | 79.2 | 74.4 | 74.7 | 75.9 | 82.0 | 90.0 | 90.7 | 82.9 | 74.9 | 163.7 |
| 100 | 73.1 | 74.5 | 75.4 | 74.4 | 74.0 | 75.2 | 76.0 | 77.1 | 83.3 | 90.9 | 90.6 | 82.8 | 77.1 | 164.2 |
| 125 | 73.0 | 72.2 | 74.5 | 74.6 | 75.0 | 76.4 | 76.9 | 78.3 | 84.2 | 90.5 | 91.2 | 82.0 | 77.4 | 164.5 |
| 160 | 73.9 | 73.4 | 76.5 | 75.9 | 77.4 | 78.3 | 77.8 | 79.4 | 85.0 | 90.8 | 90.7 | 82.7 | 78.0 | 164.8 |
| 200 | 73.1 | 75.9 | 78.0 | 77.2 | 76.8 | 78.4 | 78.5 | 80.4 | 85.4 | 91.2 | 90.0 | 81.4 | 77.7 | 164.9 |
| 250 | 74.3 | 73.8 | 76.2 | 76.2 | 76.4 | 77.3 | 78.4 | 80.8 | 85.5 | 91.6 | 89.3 | 82.7 | 76.0 | 165.3 |
| 315 | 72.8 | 73.5 | 76.3 | 75.4 | 76.8 | 78.0 | 79.1 | 81.0 | 86.8 | 90.1 | 88.4 | 82.4 | 77.0 | 165.0 |
| 400 | 72.4 | 74.3 | 76.0 | 76.1 | 77.1 | 78.6 | 79.5 | 81.7 | 85.6 | 89.0 | 86.5 | 79.4 | 74.7 | 164.2 |
| 500 | 73.4 | 74.5 | 75.8 | 76.6 | 76.8 | 78.5 | 79.1 | 81.8 | 85.0 | 88.6 | 85.3 | 78.0 | 72.4 | 164.0 |
| 630 | 74.4 | 75.0 | 76.8 | 76.2 | 78.2 | 79.5 | 80.3 | 82.3 | 84.6 | 86.9 | 83.0 | 75.9 | 71.6 | 163.5 |
| 800 | 76.9 | 77.6 | 77.4 | 78.7 | 79.7 | 79.5 | 81.5 | 84.1 | 85.4 | 85.4 | 81.8 | 73.8 | 69.7 | 163.4 |
| 1000 | 75.4 | 77.5 | 80.2 | 78.8 | 81.2 | 80.6 | 80.2 | 80.6 | 83.4 | 84.7 | 79.9 | 74.8 | 69.2 | 163.9 |
| 1250 | 75.5 | 79.2 | 81.5 | 81.4 | 83.3 | 83.1 | 80.2 | 80.7 | 81.9 | 83.0 | 78.6 | 73.0 | 68.0 | 164.7 |
| 1600 | 73.0 | 76.3 | 80.4 | 81.2 | 82.6 | 82.2 | 80.6 | 79.9 | 81.3 | 82.2 | 76.9 | 72.1 | 66.6 | 165.2 |
| 2000 | 71.7 | 75.1 | 78.9 | 79.9 | 81.7 | 81.6 | 79.5 | 79.1 | 79.9 | 78.9 | 72.7 | 67.7 | 61.6 | 165.2 |
| 2500 | 67.6 | 71.9 | 76.4 | 77.2 | 80.0 | 79.5 | 76.6 | 76.1 | 75.0 | 72.1 | 66.0 | 60.6 | 54.2 | 164.4 |
| 3150 | 59.0 | 66.3 | 71.0 | 73.0 | 75.9 | 75.8 | 71.8 | 69.9 | 73.6 | 71.1 | 63.8 | 55.0 | 44.3 | 164.8 |
| 4000 | 50.5 | 67.9 | 63.1 | 64.7 | 67.5 | 66.6 | 68.8 | 65.4 | 65.9 | 61.7 | 53.1 | 41.1 | 25.2 | 163.6 |
| 5000 | 38.0 | 45.4 | 53.7 | 57.3 | 60.6 | 60.3 | 56.1 | 55.1 | 54.2 | 47.0 | 37.2 | 21.6 | | 163.5 |
| 6300 | 14.9 | 24.7 | 35.5 | 40.5 | 42.1 | 42.6 | 41.0 | 37.5 | 37.8 | 26.0 | 12.8 | | | 161.6 |
| 8000 | | | 5.9 | 13.8 | 15.8 | 16.3 | 16.6 | 11.6 | 11.3 | | | | | 160.5 |
| 10000 | | | | | | | | | | | | | | 159.0 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GASPL 85.8 87.5 89.9 89.8 91.6 91.7 91.1 92.4 96.2 101.0 100.1 93.1 87.2 177.7

PNL 93.2 95.9 99.3 99.8 101.8 101.8 100.4 100.7 103.0 105.6 103.0 96.2 90.5

PNLT 94.4 95.9 99.9 100.9 103.0 103.0 100.9 100.7 103.6 105.6 103.0 98.2 91.5

DIAMETER RATIO 7.129 FREQUENCY SHIFT -9

| | | | | | | | |
|-----------|--------------|------------|--------|--------|---------|--------|-------|
| TEST DATE | 03-10-78 | TAPE NO. | N301 | IALPHA | SB59 | TAMB | 33.50 |
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH166 | PAMB | 29.2700 | RELHUM | 59.60 |

| | | | | |
|-------|------------|-------------------------|-------------------------------------|---------------------------|
| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
| 0400 | 0402 | 731.5 M (2400.0 FT) SL | 9032.2 SQ CM (1400.00 SQ IN) - FULL | 117.96 M/SEC (387.0 FPS) |

07/19/79 17.710

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X04030
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

FREQ

50

63

80

100

125

160

200

250 85.0 88.8 89.1 89.7 92.1 95.0 96.1 96.3 105.6 109.6 112.7 112.9 146.2

315 86.4 88.2 89.7 90.0 91.6 93.7 94.8 97.0 101.2 107.7 111.4 114.3 113.2 147.6

400 87.9 89.4 90.5 90.0 91.3 93.7 96.1 97.2 102.0 111.5 114.2 116.6 113.3 149.4

500 88.2 90.0 92.3 92.1 92.7 95.3 96.7 98.1 103.0 112.6 115.2 116.4 114.1 150.4

630 89.6 91.4 92.6 92.9 94.5 96.8 98.0 100.4 105.1 112.7 115.6 116.3 114.9 150.7

800 92.6 91.7 93.9 95.0 95.1 97.7 99.3 101.7 106.9 113.2 115.6 116.8 115.2 151.2

1000 95.5 95.3 97.3 96.1 96.1 98.3 99.9 103.3 108.3 113.0 115.0 116.6 115.1 151.1

1250 93.6 96.1 97.6 97.2 98.3 99.9 101.3 103.9 108.1 113.0 115.6 116.0 115.7 151.8

1600 95.7 93.8 95.8 96.6 97.7 100.0 101.4 104.6 108.6 113.1 116.1 117.6 115.1 151.8

2000 96.1 97.1 97.7 97.4 97.0 99.1 101.6 104.9 109.2 113.3 115.5 116.9 112.4 151.0

2500 95.3 95.8 97.1 97.4 98.2 99.8 102.5 105.4 108.9 113.7 115.2 113.8 113.3 150.5

3150 96.1 97.0 97.2 98.0 98.3 100.4 102.8 106.0 109.5 112.9 114.5 113.2 108.7 150.1

4000 95.5 96.1 97.1 97.4 97.4 100.3 102.2 105.6 108.9 112.6 113.2 110.8 107.3 149.2

5000 94.7 95.6 96.9 97.6 98.1 100.2 102.6 106.1 108.1 112.8 111.9 109.5 105.7 148.9

6300 92.8 95.5 97.5 97.0 98.5 101.1 102.6 105.7 107.6 111.7 110.4 108.2 105.9 148.3

8000 91.8 95.0 97.1 97.2 98.7 100.6 101.9 104.6 107.1 109.5 109.4 106.6 104.6 147.4

10000 89.8 93.0 96.4 96.9 98.6 101.2 101.1 103.9 105.7 109.1 107.7 106.2 103.3 147.1

12500 86.6 90.9 94.0 95.6 97.6 99.5 99.9 101.8 103.2 106.1 104.7 103.5 101.7 145.5

16000 84.2 88.3 92.9 94.4 96.6 99.1 98.0 100.4 101.2 104.2 102.2 101.9 99.4 145.2

20000 78.7 86.1 89.7 91.6 95.7 97.3 95.7 97.1 99.1 100.1 99.7 99.1 96.3 144.2

25000 77.5 83.5 86.5 88.1 93.1 94.3 92.1 92.1 96.1 95.7 95.6 94.3 94.6 142.9

31500 75.8 78.9 83.5 86.6 87.4 88.8 88.6 89.9 93.1 94.2 92.2 90.1 88.4 142.6

40000 71.1 73.6 78.5 81.2 85.6 86.3 83.2 84.7 87.5 89.0 87.9 84.1 85.1 142.1

50000 64.0 68.5 71.6 74.8 77.7 78.9 78.4 77.6 82.4 82.8 82.2 79.9 79.0 140.3

63000 58.4 62.5 64.8 67.7 69.5 70.9 72.7 71.6 78.0 75.6 75.9 74.6 73.2 139.6

80000 52.9 54.8 59.6 62.8 62.7 65.1 64.6 65.9 72.6 70.2 72.0 66.6 66.0 140.6

QASPL 105.8 106.9 108.5 108.8 109.9 112.0 113.5 116.3 119.7 124.5 126.3 127.1 124.9 162.6

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TEST DATE 03-10-78 TAPE NO. N301 ALPHA S859 TAMB 39.50
LOCATION C41 ANECH CH AERO. RDG. ADH159 PAMB 29.4900 RELHUM 29.40

MODEL TEST POINT 0403 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 177.7 SQ CM (27.55 SQ IN) - MODEL 0. FREE-JET SPEED
M/SEC (C. FPS)

33

31

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X04030

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 85.0 | 88.8 | 89.1 | 89.1 | 89.7 | 92.1 | 95.0 | 96.1 | 98.3 | 105.6 | 109.5 | 112.7 | 112.9 | 146.2 |
| 315 | 86.4 | 88.2 | 89.7 | 90.0 | 91.6 | 93.7 | 94.6 | 97.0 | 101.2 | 107.7 | 111.4 | 114.3 | 113.2 | 147.6 |
| 400 | 87.9 | 89.4 | 90.5 | 90.0 | 91.3 | 93.7 | 96.1 | 97.2 | 102.0 | 111.5 | 114.2 | 116.6 | 113.3 | 149.4 |
| 500 | 88.2 | 90.0 | 92.3 | 92.1 | 92.7 | 95.3 | 96.7 | 98.1 | 103.0 | 112.6 | 115.2 | 116.4 | 114.1 | 150.4 |
| 630 | 88.6 | 91.4 | 92.6 | 92.9 | 94.5 | 96.6 | 98.0 | 100.4 | 105.1 | 112.7 | 115.6 | 116.3 | 114.9 | 150.7 |
| 800 | 82.6 | 91.7 | 93.9 | 95.0 | 95.1 | 97.7 | 99.3 | 101.7 | 106.9 | 113.2 | 115.6 | 116.6 | 115.2 | 151.2 |
| 1000 | 95.5 | 95.3 | 97.3 | 96.1 | 96.1 | 98.3 | 99.9 | 103.3 | 108.3 | 113.1 | 115.0 | 116.6 | 115.1 | 151.1 |
| 1250 | 93.6 | 96.1 | 97.6 | 98.3 | 98.3 | 99.9 | 101.3 | 103.9 | 108.1 | 113.0 | 115.8 | 116.0 | 115.7 | 151.8 |
| 1600 | 95.7 | 93.8 | 95.8 | 96.8 | 97.7 | 100.0 | 101.4 | 104.6 | 108.8 | 113.1 | 116.1 | 117.6 | 115.1 | 151.8 |
| 2000 | 96.1 | 97.1 | 97.7 | 97.4 | 97.0 | 99.1 | 101.8 | 104.9 | 109.2 | 113.3 | 115.5 | 116.9 | 112.4 | 151.0 |
| 2500 | 95.3 | 95.8 | 97.1 | 97.4 | 98.2 | 99.6 | 102.5 | 105.4 | 108.9 | 113.7 | 115.2 | 113.8 | 110.3 | 150.5 |
| 3150 | 96.1 | 97.0 | 97.2 | 98.0 | 98.3 | 100.4 | 102.8 | 106.0 | 109.5 | 112.9 | 114.5 | 113.2 | 108.7 | 150.1 |
| 4000 | 95.5 | 96.1 | 97.4 | 97.4 | 97.4 | 100.3 | 102.2 | 105.6 | 108.9 | 112.6 | 113.2 | 110.8 | 107.3 | 149.2 |
| 5000 | 94.7 | 95.6 | 96.9 | 97.6 | 98.1 | 100.2 | 102.6 | 106.1 | 109.1 | 112.8 | 111.9 | 109.5 | 105.7 | 149.9 |
| 6300 | 92.8 | 95.5 | 97.5 | 97.0 | 98.5 | 101.1 | 102.8 | 105.7 | 107.6 | 111.7 | 110.4 | 108.2 | 105.9 | 148.3 |
| 8000 | 91.8 | 95.0 | 97.1 | 97.2 | 98.7 | 100.6 | 101.9 | 104.6 | 107.1 | 109.5 | 109.4 | 106.6 | 104.6 | 147.4 |
| 10000 | 89.8 | 93.0 | 96.4 | 96.9 | 98.8 | 101.2 | 101.1 | 103.9 | 105.7 | 109.1 | 107.7 | 106.2 | 103.3 | 147.1 |
| 12500 | 86.6 | 90.9 | 94.0 | 95.6 | 97.6 | 99.5 | 99.9 | 101.8 | 103.2 | 106.1 | 104.7 | 103.5 | 101.7 | 145.5 |
| 16000 | 84.2 | 88.3 | 92.9 | 94.4 | 96.8 | 99.1 | 98.0 | 100.4 | 101.2 | 104.2 | 102.2 | 101.9 | 99.4 | 145.2 |
| 20000 | 78.7 | 86.1 | 89.7 | 91.8 | 95.7 | 97.3 | 95.7 | 97.1 | 99.1 | 100.1 | 99.7 | 99.1 | 96.3 | 144.2 |
| 25000 | 77.5 | 83.5 | 86.5 | 88.1 | 93.1 | 94.3 | 92.1 | 92.1 | 96.1 | 95.7 | 95.6 | 94.3 | 94.6 | 142.9 |
| 31500 | 75.8 | 78.9 | 83.5 | 86.6 | 87.4 | 88.6 | 88.6 | 89.9 | 93.1 | 94.2 | 92.2 | 90.1 | 88.4 | 142.6 |
| 40000 | 71.1 | 73.6 | 78.5 | 81.2 | 85.6 | 86.3 | 83.2 | 84.7 | 87.5 | 89.0 | 87.9 | 84.1 | 85.1 | 142.1 |
| 50000 | 64.0 | 68.5 | 71.6 | 74.8 | 77.7 | 78.9 | 78.4 | 77.6 | 82.4 | 82.8 | 82.2 | 79.9 | 79.0 | 140.3 |
| 63000 | 59.4 | 62.5 | 64.8 | 67.7 | 69.5 | 70.9 | 72.7 | 71.6 | 78.0 | 75.8 | 75.9 | 74.6 | 73.2 | 139.6 |
| 80000 | 52.9 | 54.8 | 59.6 | 62.8 | 62.7 | 65.1 | 64.6 | 65.9 | 72.6 | 70.2 | 72.0 | 66.6 | 66.0 | 140.6 |

QASPL 105.8 106.9 108.5 108.8 109.9 112.0 113.5 116.3 119.7 124.5 126.3 127.1 124.9 162.6

| | | | |
|------------------------------|----------------------------|-------|-----------------------------|
| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 0. | REFRACTION CORRECTION - YES |
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| | | | |
|------------------------|-------------------|--------------|--------------|
| TEST DATE 03-10-78 | TAPE NO. N301 | ALPHA SB59 | TAMB 38.50 |
| LOCATION C41. ANECH CH | AERO. RDG. ADH159 | PAMB 29.4900 | RELHUM 29.40 |

| | | | |
|------------------|-------------------|------------------------------------|--------------------|
| MODEL TEST POINT | ACOUSTIC RANGE | 177.7 SQ CM (27.55 SQ IN) - MODEL | FREE-JET SPEED |
| O400 | 12.2 M (40.0 FT) | ARC | 0. M/SEC (0. FPS) |

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07/19/79 17.710

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, S8 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X04036

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PNL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 65.5 | 66.6 | 70.7 | 70.9 | 72.7 | 75.2 | 77.4 | 78.2 | 82.2 | 90.7 | 91.6 | 91.0 | 55.3 | 166.5 |
| 63 | 65.6 | 69.2 | 72.5 | 73.0 | 74.0 | 76.8 | 78.0 | 79.0 | 83.2 | 91.7 | 92.6 | 91.6 | 56.1 | 167.5 |
| 80 | 67.1 | 70.5 | 72.6 | 73.8 | 75.6 | 78.1 | 79.3 | 81.3 | 85.3 | 91.6 | 93.1 | 91.6 | 56.9 | 167.6 |
| 100 | 70.1 | 70.7 | 74.0 | 75.6 | 76.3 | 79.1 | 80.6 | 82.5 | 87.0 | 92.3 | 93.1 | 92.0 | 57.0 | 168.2 |
| 125 | 72.8 | 74.2 | 77.3 | 76.8 | 77.3 | 79.6 | 81.1 | 84.1 | 86.3 | 92.0 | 92.3 | 91.7 | 56.6 | 168.1 |
| 160 | 70.7 | 74.9 | 77.5 | 77.6 | 79.3 | 81.1 | 82.3 | 84.6 | 88.0 | 91.7 | 93.0 | 92.6 | 56.8 | 168.9 |
| 200 | 72.6 | 72.3 | 75.5 | 77.3 | 78.6 | 81.1 | 82.3 | 85.0 | 88.5 | 91.7 | 93.0 | 92.0 | 55.0 | 168.6 |
| 250 | 72.7 | 75.4 | 77.1 | 77.7 | 77.7 | 80.0 | 82.5 | 85.2 | 88.6 | 91.6 | 92.0 | 90.0 | 52.5 | 168.1 |
| 315 | 71.5 | 73.8 | 76.3 | 77.4 | 78.6 | 80.4 | 82.9 | 85.4 | 88.0 | 91.7 | 91.3 | 87.4 | 79.6 | 167.6 |
| 400 | 71.8 | 74.5 | 76.0 | 77.6 | 78.4 | 80.7 | 82.9 | 85.6 | 88.3 | 90.4 | 90.2 | 86.0 | 78.9 | 167.2 |
| 500 | 70.7 | 73.3 | 75.6 | 76.7 | 77.3 | 80.3 | 82.0 | 85.0 | 87.4 | 89.7 | 89.4 | 83.0 | 74.6 | 166.3 |
| 630 | 69.4 | 72.4 | 75.0 | 76.7 | 77.7 | 80.0 | 82.2 | 85.2 | 86.3 | 89.6 | 86.6 | 81.0 | 71.9 | 166.0 |
| 800 | 67.0 | 71.9 | 75.4 | 75.8 | 77.8 | 80.6 | 82.1 | 84.5 | 85.5 | 88.1 | 84.6 | 79.0 | 70.9 | 165.3 |
| 1000 | 65.6 | 71.1 | 74.6 | 75.6 | 77.9 | 80.0 | 81.1 | 83.2 | 84.7 | 85.6 | 83.2 | 76.7 | 68.5 | 164.5 |
| 1250 | 63.0 | 68.8 | 73.8 | 75.4 | 77.6 | 80.4 | 80.1 | 82.3 | 83.1 | 84.9 | 80.9 | 75.5 | 65.8 | 164.2 |
| 1600 | 59.0 | 66.1 | 71.0 | 73.7 | 76.4 | 78.5 | 78.7 | 80.0 | 80.1 | 81.3 | 77.1 | 71.4 | 61.8 | 162.6 |
| 2000 | 55.6 | 62.9 | 69.5 | 72.3 | 75.4 | 77.9 | 76.6 | 78.3 | 77.6 | 78.6 | 73.6 | 68.3 | 56.5 | 162.2 |
| 2500 | 48.3 | 59.5 | 65.4 | 69.0 | 73.6 | 75.6 | 73.6 | 74.3 | 74.9 | 73.5 | 69.3 | 62.6 | 48.5 | 161.2 |
| 3150 | 43.8 | 54.4 | 60.4 | 63.7 | 69.6 | 71.3 | 68.6 | 67.6 | 70.0 | 66.6 | 61.9 | 52.6 | 38.4 | 160.0 |
| 4000 | 35.9 | 45.0 | 53.5 | 59.0 | 61.1 | 62.8 | 62.3 | 62.3 | 63.1 | 60.4 | 52.2 | 39.7 | 17.7 | 159.7 |
| 5000 | 21.4 | 32.2 | 42.3 | 48.1 | 54.3 | 55.6 | 51.9 | 51.7 | 51.3 | 47.6 | 36.1 | 20.1 | 159.1 | |
| 6300 | 12.9 | 23.3 | 31.0 | 36.3 | 38.3 | 37.0 | 33.6 | 34.1 | 34.1 | 27.2 | 14.7 | | 157.4 | |
| 8000 | | | | | | | | | | | | | 156.6 | |
| 10000 | | | | | | | | | | | | | 157.7 | |

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|-------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| GASPL | 81.8 | 84.5 | 87.3 | 88.3 | 89.6 | 92.1 | 93.5 | 95.9 | 96.6 | 102.5 | 102.6 | 101.2 | 95.4 | 179.5 |
| PNL | 85.6 | 89.6 | 93.1 | 95.2 | 97.9 | 100.1 | 100.2 | 102.0 | 104.1 | 106.7 | 106.6 | 102.9 | 95.8 | |
| PNLT | 85.6 | 89.6 | 93.1 | 95.6 | 99.1 | 101.2 | 100.2 | 102.0 | 104.1 | 106.7 | 106.7 | 102.9 | 96.9 | |

DIAMETER RATIO 7.129 FREQUENCY SHIFT -9

TEST DATE 03-10-78 TAPE NO. N301 ALPHA SB59 TAMB 39.50
LOCATION C41 ANECH CH AERO. RDG. ADH159 PAMB 29.4900 RELHUM 29.40

MODEL TEST POINT 0403 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)

07/19/79 17.710

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X04040
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ
50
63
80

100
125
160
200

250 80.7 82.1 84.0 84.9 85.7 87.1 89.6 91.0 93.7 101.6 105.8 109.0 107.9 142.0
315 82.2 83.5 85.0 85.3 86.4 88.6 89.7 91.4 95.3 103.7 107.1 110.3 107.2 143.1
400 83.5 84.8 85.9 85.9 87.0 89.1 90.7 92.4 96.9 107.5 110.2 110.6 104.7 144.7
500 84.4 84.9 87.2 87.0 88.6 90.5 92.1 93.8 98.5 109.1 112.0 110.2 100.6 145.6
630 84.5 85.3 87.6 87.6 89.7 91.3 92.7 96.4 100.4 109.9 112.6 108.5 97.7 146.0
800 86.8 85.8 88.9 88.9 90.2 92.3 94.5 97.9 102.6 110.7 112.6 106.3 96.2 146.1
1000 88.7 86.7 90.2 90.2 90.8 93.7 95.6 98.5 104.0 110.8 111.4 103.6 95.3 145.7
1250 87.5 89.5 91.6 91.4 92.4 95.1 96.4 99.9 104.1 110.9 111.8 102.7 94.6 145.9
1600 89.3 88.2 90.7 91.0 92.3 95.2 96.8 100.5 105.7 111.3 111.8 102.0 94.7 146.2
2000 88.3 88.8 91.0 90.6 91.9 94.8 97.2 100.8 105.5 111.4 111.1 102.3 94.8 146.1
2500 89.2 89.7 91.2 92.2 92.5 95.7 98.3 101.7 105.2 111.8 110.0 102.7 95.0 146.1
3150 89.5 90.0 91.3 92.5 93.3 96.5 99.1 102.8 106.3 110.4 109.6 102.5 94.5 145.7
4000 92.3 91.4 92.7 92.2 93.2 96.8 99.5 102.4 105.7 109.8 109.0 101.9 94.1 145.2
5000 95.1 93.9 94.7 94.2 93.7 96.3 99.2 102.7 105.4 110.1 108.0 101.1 94.3 145.3
6300 96.5 97.4 97.4 95.4 94.9 97.7 99.2 102.1 105.3 109.3 106.8 100.1 94.8 145.2
8000 96.8 98.1 98.9 98.8 97.8 98.4 99.2 101.6 104.9 107.8 105.5 99.6 93.9 145.0
10000 93.5 95.5 98.6 98.9 99.5 100.4 99.8 101.9 103.9 107.2 104.7 98.9 92.8 145.2
12500 90.8 92.6 95.5 97.0 98.8 99.7 99.4 100.3 101.9 105.2 101.9 97.4 91.5 144.3
16000 89.3 91.5 94.6 95.8 97.9 99.4 98.1 99.3 100.7 103.8 99.6 96.3 91.7 144.4
20000 84.2 89.0 91.1 93.3 96.5 97.6 95.8 97.2 98.5 100.6 96.8 93.6 90.3 143.8
25000 82.6 86.0 88.3 89.5 94.0 94.6 93.7 93.0 96.4 95.8 93.6 90.6 89.2 143.0
31500 81.3 81.7 85.6 87.9 88.1 89.3 89.0 91.1 93.2 94.7 91.0 86.3 84.1 143.0
40000 76.6 76.3 81.2 82.7 86.7 87.4 85.0 85.8 88.2 88.6 85.5 81.1 79.3 142.4
50000 69.0 71.0 73.3 75.9 78.8 79.7 79.2 83.6 80.9 78.9 76.4 73.2 140.3
63000 63.5 65.0 66.8 69.3 70.6 70.7 73.8 72.2 78.0 73.7 71.9 69.4 66.9 138.9
80000 57.5 56.6 60.9 64.2 63.3 65.4 65.5 66.0 71.1 67.4 66.0 60.2 58.8 139.0

QASPL 104.0 104.8 106.5 106.7 107.9 109.4 110.3 113.0 116.5 122.2 122.5 118.4 113.0 158.7

TEST DATE 03-10-78 TAPE NO. N301 ALPHA SB59 TANS 33.50
LOCATION C41 ANECH CH AERO. RDG. ADH165 PAMB 29.2700 RELHUM 56.70

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 177.7 SQ CM (27.55 SQ IN) - MODEL 117.96 M/SEC (387.0 FPS)
0400 0404

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07/19/79 17.710

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X04040

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

OASPL

110.5

110.7

111.6

111.6

111.8

111.8

112.7

116.9

121.5

121.4

118.6

117.7

159.8

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 387.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-10-78 TAPE NO. N301 ALPHA 5859 TAMS 33.50
LOCATION C41 ANECH CH AERO. RDG. ADH165 PAMB 29.2700 RELNUM 55.70

MODEL TEST POINT 0400 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 177.7 SQ CH (27.55 SQ IN) - MODEL 117.96 M/SEC (367.0 FPS)
FREE-JET SPEED

07/19/79 17.710

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 99.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X04045

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 67.2 | 68.8 | 70.0 | 69.6 | 70.0 | 70.8 | 71.3 | 71.6 | 76.4 | 85.4 | 86.8 | 84.4 | 75.1 | 180.5 |
| 63 | 67.9 | 69.7 | 70.6 | 69.9 | 71.7 | 72.2 | 72.4 | 72.4 | 78.3 | 86.3 | 87.5 | 83.3 | 73.9 | 160.9 |
| 80 | 69.3 | 70.2 | 72.1 | 71.2 | 79.5 | 73.1 | 73.0 | 74.9 | 80.9 | 87.4 | 88.1 | 82.1 | 74.7 | 161.6 |
| 100 | 72.1 | 72.7 | 74.2 | 72.9 | 73.5 | 74.2 | 74.8 | 76.5 | 82.6 | 88.0 | 87.6 | 80.7 | 76.2 | 161.7 |
| 125 | 71.5 | 71.0 | 73.8 | 73.1 | 74.1 | 75.6 | 75.9 | 77.1 | 82.7 | 88.1 | 87.3 | 79.5 | 75.0 | 161.8 |
| 160 | 73.2 | 71.7 | 75.0 | 74.4 | 75.7 | 77.0 | 76.8 | 78.5 | 84.4 | 88.5 | 87.7 | 78.6 | 74.6 | 162.4 |
| 200 | 71.8 | 74.4 | 76.3 | 75.4 | 75.6 | 77.2 | 77.2 | 79.1 | 84.4 | 88.7 | 87.2 | 79.0 | 74.7 | 162.6 |
| 250 | 73.3 | 72.8 | 75.2 | 75.0 | 75.1 | 76.8 | 77.6 | 79.5 | 84.2 | 89.2 | 86.2 | 79.5 | 74.8 | 162.9 |
| 315 | 71.8 | 73.0 | 75.4 | 74.4 | 75.8 | 77.8 | 78.8 | 80.5 | 85.5 | 88.1 | 86.0 | 79.5 | 74.4 | 163.0 |
| 400 | 72.2 | 73.6 | 75.3 | 75.9 | 76.6 | 78.6 | 79.7 | 81.7 | 85.1 | 87.7 | 85.5 | 78.7 | 73.4 | 163.3 |
| 500 | 72.0 | 73.6 | 75.1 | 76.1 | 76.6 | 78.3 | 79.4 | 81.6 | 84.8 | 87.7 | 84.0 | 77.2 | 72.6 | 163.3 |
| 630 | 74.1 | 74.5 | 76.3 | 75.7 | 77.0 | 79.1 | 80.3 | 81.9 | 84.5 | 86.8 | 82.7 | 76.0 | 72.5 | 163.4 |
| 800 | 74.7 | 75.5 | 77.3 | 77.1 | 77.7 | 80.2 | 80.0 | 81.1 | 84.0 | 85.1 | 81.1 | 75.1 | 70.8 | 163.2 |
| 1000 | 74.8 | 77.9 | 79.1 | 77.6 | 80.8 | 80.8 | 80.0 | 80.5 | 83.1 | 84.4 | 80.1 | 74.0 | 68.8 | 163.6 |
| 1250 | 75.5 | 79.0 | 81.0 | 81.2 | 82.5 | 82.6 | 80.6 | 80.6 | 81.6 | 82.9 | 77.8 | 72.7 | 67.3 | 164.4 |
| 1500 | 72.4 | 76.6 | 80.7 | 81.2 | 82.1 | 81.6 | 80.3 | 79.2 | 81.2 | 82.3 | 76.1 | 71.6 | 66.1 | 165.0 |
| 2000 | 70.9 | 74.8 | 78.3 | 79.6 | 81.1 | 81.3 | 79.1 | 78.6 | 79.7 | 79.5 | 72.9 | 67.7 | 61.8 | 165.0 |
| 2500 | 67.2 | 72.0 | 76.1 | 77.3 | 79.1 | 78.9 | 76.3 | 76.2 | 75.1 | 71.7 | 66.1 | 59.9 | 53.8 | 164.1 |
| 3150 | 58.2 | 66.4 | 70.1 | 72.7 | 75.2 | 74.6 | 71.9 | 68.8 | 72.8 | 71.2 | 63.4 | 54.2 | 44.1 | 164.3 |
| 4000 | 49.6 | 58.0 | 62.7 | 64.8 | 66.3 | 66.5 | 55.9 | 65.1 | 65.2 | 61.5 | 52.4 | 40.4 | 24.8 | 163.1 |
| 5000 | 37.6 | 45.2 | 53.0 | 56.9 | 59.9 | 59.6 | 56.1 | 54.7 | 54.7 | 46.4 | 36.2 | 21.1 | | 163.1 |
| 6300 | 14.8 | 25.2 | 36.1 | 40.6 | 41.9 | 42.1 | 40.7 | 37.2 | 38.0 | 26.1 | 12.4 | | | 161.6 |
| 8000 | | | | | | | | | | | | | | 160.1 |
| 10000 | | | | | | | | | | | | | | 158.2 |

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GASPL 85.0 86.9 89.2 89.3 90.6 91.3 90.6 91.6 95.5 99.2 97.7 91.6 85.6 176.7
 PNL 92.4 95.5 98.8 99.4 100.9 101.3 100.0 100.2 102.6 104.3 101.3 94.6 86.9
 PNL 93.6 95.5 99.5 100.0 102.2 102.5 100.0 100.2 103.2 106.4 101.3 94.8 90.0

DIAMETER RATIO 7.129 FREQUENCY SHIFT -9

TEST DATE 03-10-78 TAPE NO. N301 ALPHA SB59 TAMB 33.50
 LOCATION C41 ANECH CH AERO. RDG. ADH165 PAMB 29.2700 RELHUM 56.70

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
 0400 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.96 M/SEC (387.0 FPS)

07/19/79 17.710

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODEL X04050
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

106.0

107.1

109.0

110.3

112.2

113.4

116.1

119.2

123.7

124.9

125.4

123.5

161.6

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TEST DATE 03-10-78

LOCATION C41 ANECH CH

TAPE NO. N301

AERO. RDC. ADH168

I ALPHA SB59

PAMB 29.2550

TAMB 33.00

RELHUM 63.90

MODEL TEST POINT

0400 0405

ACOUSTIC RANGE

12.2 M (40.0 FT) ARC

SIZE

177.7 SQ CM (27.66 SQ IN) - MODEL

FREE-JET SPEED

0. M/SEC (0. FPS)

337

07/19/79 17.710

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X04050

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PVL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

10000000

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GASPL 106.0 107.1 109.0 109.0 110.3 112.2 113.4 116.1 119.2 123.7 124.9 125.4 125.5 161.8

MODEL/FULL SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES
 INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-10-78 TAPE NO. N301 ALPHA 5859 TAPB 33.00
 LOCATION C41 ANECH CH AERO. RDG. ADH168 PAMB 29.2550 RELHUM 63.90

MODEL TEST POINT 12.2 M (40.0 FT) ARC 177.7 SQ CM (27.55 SQ IN) - MODEL 0. FREE-JET SPEED
 0400 0405 ACUSTIC RANGE SIZE M/SEC (O. FPS)

07/19/79 17.710

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70. PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X04055

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PML |
|-------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 50 | 64.8 | 68.1 | 70.4 | 71.2 | 72.7 | 75.2 | 76.4 | 77.7 | 80.9 | 89.2 | 90.0 | 89.8 | 84.3 | 185.1 |
| 63 | 66.1 | 68.6 | 71.7 | 72.2 | 73.2 | 76.0 | 77.5 | 78.5 | 82.2 | 90.2 | 90.8 | 89.5 | 84.8 | 185.7 |
| 80 | 66.9 | 69.9 | 72.5 | 73.6 | 76.3 | 77.3 | 78.3 | 80.8 | 84.0 | 90.5 | 90.6 | 89.1 | 84.3 | 185.7 |
| 100 | 69.1 | 70.2 | 74.0 | 75.0 | 76.0 | 78.0 | 80.3 | 82.3 | 85.8 | 91.5 | 90.1 | 89.0 | 84.5 | 188.0 |
| 125 | 72.0 | 73.1 | 76.3 | 76.3 | 76.8 | 79.0 | 81.0 | 83.0 | 87.3 | 91.0 | 89.0 | 88.2 | 83.8 | 185.8 |
| 160 | 69.4 | 73.1 | 76.5 | 76.7 | 78.3 | 80.8 | 81.3 | 84.2 | 87.5 | 90.7 | 90.4 | 89.5 | 84.3 | 186.7 |
| 200 | 71.5 | 72.3 | 76.5 | 76.5 | 78.0 | 80.7 | 81.7 | 84.5 | 87.9 | 90.4 | 90.9 | 89.7 | 84.4 | 187.2 |
| 250 | 72.3 | 75.1 | 78.0 | 77.1 | 77.6 | 80.1 | 81.8 | 84.1 | 88.0 | 90.9 | 90.7 | 89.4 | 82.8 | 187.3 |
| 315 | 71.3 | 73.4 | 76.1 | 77.7 | 78.0 | 80.5 | 83.0 | 84.9 | 87.1 | 90.5 | 90.4 | 88.0 | 79.9 | 187.1 |
| 400 | 72.3 | 74.8 | 76.6 | 77.4 | 78.2 | 81.0 | 82.5 | 85.2 | 87.6 | 89.9 | 89.7 | 88.8 | 78.2 | 186.7 |
| 500 | 71.5 | 73.0 | 75.9 | 76.0 | 77.8 | 80.1 | 82.1 | 85.0 | 86.9 | 88.7 | 88.6 | 82.8 | 73.9 | 186.0 |
| 630 | 70.4 | 73.1 | 76.0 | 76.7 | 78.0 | 80.0 | 82.3 | 84.3 | 86.0 | 88.1 | 86.6 | 81.1 | 71.5 | 185.5 |
| 800 | 68.9 | 73.0 | 76.5 | 76.4 | 78.4 | 80.7 | 81.5 | 84.1 | 85.3 | 87.6 | 85.0 | 79.4 | 70.0 | 180.3 |
| 1000 | 67.6 | 72.6 | 76.3 | 76.9 | 78.5 | 80.3 | 81.4 | 83.2 | 85.2 | 86.3 | 83.5 | 77.0 | 67.7 | 184.9 |
| 1250 | 64.5 | 70.5 | 75.0 | 76.9 | 79.1 | 80.9 | 80.9 | 82.8 | 83.3 | 84.7 | 81.4 | 76.5 | 65.0 | 184.5 |
| 1600 | 61.2 | 67.9 | 72.0 | 74.7 | 77.4 | 79.4 | 79.4 | 81.2 | 81.2 | 81.4 | 78.4 | 71.9 | 61.2 | 183.4 |
| 2000 | 58.6 | 66.0 | 71.3 | 73.6 | 76.9 | 78.9 | 77.9 | 79.3 | 78.9 | 79.7 | 75.2 | 69.0 | 56.2 | 183.3 |
| 2500 | 51.3 | 62.6 | 67.0 | 70.7 | 75.5 | 76.4 | 74.8 | 75.8 | 75.7 | 75.2 | 69.9 | 62.6 | 48.7 | 182.3 |
| 3150 | 46.9 | 56.9 | 62.9 | 65.9 | 71.5 | 72.1 | 70.4 | 69.0 | 71.0 | 68.6 | 62.9 | 53.7 | 38.9 | 181.3 |
| 4000 | 39.1 | 47.7 | 56.2 | 60.8 | 62.8 | 64.3 | 63.8 | 63.6 | 64.5 | 62.3 | 54.1 | 39.7 | 18.6 | 181.3 |
| 5000 | 24.7 | 34.8 | 45.3 | 50.1 | 55.7 | 57.2 | 53.2 | 53.1 | 52.6 | 49.4 | 39.1 | 21.9 | 160.6 | |
| 6300 | 15.2 | 25.7 | 32.9 | 37.7 | 40.0 | 38.4 | 35.3 | 35.8 | 29.2 | 15.7 | | 158.9 | 158.4 | |
| 8000 | | | | | | | | | | | | | 159.2 | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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QASPL 81.7 84.4 87.6 88.3 89.9 92.1 93.3 95.6 98.1 101.5 101.0 96.2 93.6 178.6
PNL 86.4 90.2 94.3 96.0 98.8 100.6 100.7 102.4 103.8 106.1 104.9 101.6 94.5
PNLT 86.4 90.2 94.3 96.0 100.0 101.7 101.2 102.4 103.8 106.1 104.9 101.6 95.7

DIAMETER RATIO 7.129 FREQUENCY SHIFT -9

TEST DATE 03-10-78 TAPE NO. N301 ALPHA SB59 TAMB 33.00
LOCATION C41 ANECH CH AERG. RDG. ADH168 PAMB 29.2550 RELHUM 63.60

MODEL TEST POINT 0405 ACQUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 0. FREE-JET SPEED M/SEC (0. FPS)

07/19/79 17.710

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70. PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL XC4060
 BACKGROUND FJB400-FMODL XD1400

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 60.1 | 82.4 | 83.2 | 84.9 | 85.2 | 86.6 | 88.5 | 90.0 | 93.2 | 100.0 | 108.0 | 108.2 | 107.4 | 141.3 |
| 315 | 81.7 | 82.9 | 84.2 | 84.6 | 85.9 | 88.0 | 88.9 | 90.6 | 94.8 | 102.5 | 106.1 | 109.1 | 108.5 | 142.0 |
| 400 | 83.0 | 83.8 | 84.8 | 86.4 | 88.3 | 89.7 | 91.4 | 96.1 | 106.0 | 108.2 | 109.3 | 103.7 | 143.1 | |
| 500 | 83.6 | 83.9 | 85.7 | 86.0 | 87.6 | 88.9 | 90.8 | 93.3 | 97.2 | 107.1 | 109.5 | 107.9 | 100.1 | 143.4 |
| 630 | 84.0 | 85.5 | 87.3 | 87.1 | 89.7 | 90.6 | 92.5 | 95.1 | 100.1 | 108.7 | 109.3 | 106.0 | 96.7 | 143.8 |
| 800 | 85.5 | 85.6 | 87.8 | 89.1 | 89.5 | 92.1 | 93.7 | 96.9 | 101.6 | 109.2 | 109.1 | 103.3 | 94.2 | 143.8 |
| 1000 | 87.6 | 86.2 | 89.5 | 89.2 | 90.1 | 93.2 | 94.6 | 97.8 | 103.5 | 110.1 | 108.2 | 100.6 | 92.8 | 144.0 |
| 1250 | 87.0 | 88.8 | 90.8 | 90.6 | 91.7 | 94.3 | 95.7 | 99.4 | 104.1 | 109.4 | 109.3 | 99.7 | 92.1 | 144.2 |
| 1600 | 89.1 | 87.9 | 90.2 | 91.0 | 92.3 | 95.2 | 96.8 | 100.2 | 104.2 | 109.8 | 108.3 | 99.0 | 92.0 | 144.2 |
| 2000 | 88.0 | 88.2 | 90.3 | 90.8 | 91.9 | 94.5 | 97.4 | 100.6 | 105.3 | 109.6 | 106.8 | 98.0 | 92.1 | 144.0 |
| 2500 | 88.6 | 89.7 | 90.9 | 91.4 | 93.0 | 95.6 | 98.3 | 101.5 | 104.9 | 109.8 | 107.0 | 98.7 | 92.4 | 144.3 |
| 3150 | 89.2 | 89.7 | 91.2 | 92.0 | 93.3 | 96.2 | 98.3 | 102.5 | 106.0 | 109.1 | 105.5 | 100.0 | 92.5 | 144.3 |
| 4000 | 90.8 | 90.4 | 91.9 | 92.1 | 93.2 | 96.1 | 98.5 | 102.4 | 105.4 | 108.8 | 106.9 | 98.9 | 93.1 | 144.2 |
| 5000 | 94.0 | 93.9 | 94.9 | 93.1 | 93.9 | 96.8 | 99.2 | 102.9 | 105.1 | 109.1 | 107.2 | 100.3 | 93.8 | 144.7 |
| 6300 | 96.2 | 96.3 | 97.1 | 95.1 | 95.6 | 97.7 | 99.1 | 102.8 | 105.2 | 109.0 | 106.5 | 100.3 | 94.0 | 145.0 |
| 8000 | 96.1 | 97.5 | 98.2 | 97.5 | 97.0 | 98.2 | 99.2 | 102.3 | 105.1 | 108.3 | 105.7 | 99.1 | 93.3 | 145.1 |
| 10000 | 93.2 | 94.8 | 98.4 | 99.0 | 99.9 | 99.9 | 99.0 | 102.4 | 104.2 | 107.4 | 104.2 | 98.9 | 92.5 | 145.2 |
| 12500 | 90.6 | 92.4 | 94.8 | 96.3 | 97.8 | 99.2 | 98.9 | 100.6 | 102.0 | 105.2 | 101.7 | 96.9 | 91.3 | 144.1 |
| 16000 | 89.6 | 91.9 | 94.2 | 94.9 | 96.3 | 99.3 | 97.7 | 99.7 | 100.8 | 103.9 | 100.0 | 95.6 | 91.8 | 144.3 |
| 20000 | 84.8 | 89.4 | 91.8 | 92.7 | 96.2 | 97.2 | 95.4 | 97.3 | 98.7 | 100.1 | 96.9 | 94.0 | 89.9 | 143.6 |
| 25000 | 83.3 | 86.2 | 88.8 | 89.4 | 94.0 | 95.6 | 92.7 | 93.5 | 96.4 | 96.3 | 93.3 | 90.8 | 88.9 | 143.1 |
| 31500 | 81.5 | 82.2 | 85.9 | 87.9 | 88.3 | 89.3 | 89.3 | 90.6 | 93.5 | 94.5 | 91.0 | 86.0 | 83.5 | 142.9 |
| 40000 | 76.3 | 76.8 | 81.2 | 82.8 | 86.7 | 88.1 | 84.2 | 86.1 | 88.7 | 88.4 | 85.5 | 81.1 | 79.3 | 142.6 |
| 50000 | 68.7 | 71.8 | 73.2 | 76.4 | 79.0 | 80.5 | 79.5 | 79.0 | 83.7 | 81.2 | 79.4 | 75.7 | 73.0 | 140.5 |
| 63000 | 63.7 | 63.6 | 66.7 | 69.4 | 70.9 | 71.8 | 73.6 | 72.3 | 78.1 | 74.1 | 72.2 | 68.9 | 66.9 | 139.1 |
| 80000 | 57.8 | 56.7 | 61.2 | 64.5 | 63.8 | 65.2 | 65.5 | 66.1 | 70.9 | 68.0 | 66.0 | 60.5 | 58.8 | 139.1 |
| GASPL | 103.5 | 104.4 | 106.1 | 106.1 | 107.4 | 109.2 | 109.9 | 113.1 | 116.2 | 121.0 | 120.0 | 116.7 | 112.2 | 157.7 |

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| TEST DATE | 03-10-78 | TAPE NO. | N301 | IALPHA | SB59 | TAMB | 33.00 |
|-----------|--------------|------------|--------|--------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH167 | PAMB | 29.2650 | RELHUM | 62.70 |

| MODEL | TEST POINT | ACQUSTIC RANGE | SIZE | FREE-JET SPEED |
|-------|------------|-----------------------|------------------------------------|---------------------------|
| 0400 | 0406 | 12.2 M (40.0 FT) ARC | 177.7 SQ CM (27.65 SQ IN) - MODEL | 117.96 M/SEC (387.0 FPS) |

07/19/79 17.710

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X04060

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 87.7 | 88.6 | 88.0 | 88.0 | 86.7 | 86.6 | 86.7 | 86.5 | 91.5 | 98.2 | 101.4 | 104.7 | 103.9 | 139.2 |
| 315 | 87.7 | 88.6 | 88.0 | 88.0 | 87.6 | 88.2 | 87.6 | 87.6 | 94.3 | 103.7 | 106.6 | 107.6 | 104.7 | 141.4 |
| 400 | 89.1 | 89.0 | 87.8 | 88.2 | 88.6 | 89.0 | 89.7 | 89.7 | 95.0 | 104.3 | 106.9 | 106.9 | 102.7 | 141.6 |
| 500 | 89.8 | 89.6 | 89.3 | 87.8 | 89.4 | 89.2 | 89.8 | 91.1 | 97.8 | 105.9 | 106.7 | 105.4 | 100.9 | 141.7 |
| 630 | 90.9 | 90.0 | 90.4 | 89.3 | 96.1 | 90.9 | 91.4 | 92.8 | 99.7 | 103.8 | 106.9 | 103.6 | 100.5 | 142.1 |
| 800 | 94.1 | 93.9 | 93.8 | 91.6 | 91.4 | 92.6 | 92.8 | 94.6 | 101.8 | 108.0 | 103.5 | 101.9 | 100.6 | 142.6 |
| 1000 | 94.0 | 91.8 | 92.7 | 92.6 | 92.1 | 93.8 | 93.7 | 95.5 | 102.6 | 107.5 | 107.7 | 101.1 | 100.3 | 142.9 |
| 1250 | 95.0 | 92.4 | 94.4 | 92.8 | 93.9 | 95.1 | 95.0 | 97.3 | 103.0 | 108.1 | 107.0 | 100.7 | 100.4 | 143.1 |
| 1600 | 94.4 | 95.0 | 95.8 | 94.2 | 94.7 | 96.1 | 96.3 | 98.4 | 104.4 | 108.3 | 105.9 | 100.1 | 100.6 | 143.4 |
| 2000 | 96.5 | 94.2 | 95.2 | 94.7 | 94.4 | 95.7 | 97.1 | 99.0 | 104.4 | 108.6 | 106.4 | 101.1 | 101.7 | 143.8 |
| 2500 | 95.4 | 94.6 | 95.4 | 94.6 | 95.8 | 97.2 | 98.4 | 100.2 | 105.9 | 108.7 | 106.5 | 102.3 | 102.3 | 144.4 |
| 3150 | 96.0 | 96.0 | 96.2 | 95.5 | 96.4 | 98.1 | 98.8 | 101.7 | 106.0 | 109.0 | 107.6 | 102.5 | 103.6 | 145.0 |
| 4000 | 96.5 | 96.1 | 96.6 | 96.2 | 96.7 | 98.5 | 99.5 | 102.2 | 106.0 | 109.5 | 108.0 | 104.2 | 104.5 | 145.6 |
| 5000 | 98.1 | 96.8 | 97.4 | 96.6 | 97.8 | 99.8 | 100.7 | 103.0 | 106.2 | 109.6 | 107.6 | 104.5 | 105.3 | 146.0 |
| 6300 | 100.3 | 99.8 | 100.2 | 97.6 | 99.2 | 100.7 | 100.6 | 103.0 | 106.2 | 109.0 | 106.8 | 103.3 | 104.7 | 146.2 |
| 8000 | 101.3 | 101.3 | 101.6 | 99.0 | 100.8 | 101.2 | 100.7 | 102.5 | 105.6 | 108.5 | 105.7 | 103.6 | 104.4 | 146.5 |
| 10000 | 101.5 | 102.7 | 102.8 | 101.5 | 103.0 | 102.9 | 100.8 | 102.7 | 104.2 | 107.1 | 104.2 | 102.7 | 104.5 | 147.0 |
| 12500 | 99.8 | 100.7 | 103.5 | 102.6 | 102.3 | 102.2 | 101.0 | 101.3 | 104.3 | 107.2 | 103.9 | 102.6 | 106.1 | 147.7 |
| 16000 | 99.3 | 100.0 | 101.0 | 101.0 | 101.1 | 102.3 | 100.1 | 101.0 | 103.3 | 104.4 | 101.8 | 101.8 | 104.5 | 147.6 |
| 20000 | 98.0 | 99.0 | 100.0 | 99.2 | 100.7 | 100.2 | 97.9 | 99.1 | 99.4 | 98.9 | 96.2 | 96.6 | 101.3 | 146.8 |
| 25000 | 92.6 | 96.0 | 96.9 | 96.4 | 98.5 | 98.6 | 94.1 | 93.6 | 98.9 | 98.8 | 96.9 | 95.2 | 98.7 | 147.2 |
| 31500 | 90.3 | 92.0 | 93.2 | 92.4 | 92.3 | 92.3 | 91.6 | 92.1 | 95.8 | 95.2 | 92.5 | 90.9 | 95.5 | 146.1 |
| 40000 | 84.9 | 85.0 | 87.8 | 88.9 | 91.2 | 91.1 | 86.7 | 88.0 | 91.1 | 88.4 | 86.9 | 85.9 | 89.9 | 145.9 |
| 50000 | 81.4 | 81.4 | 84.4 | 84.4 | 83.6 | 83.5 | 82.0 | 81.0 | 86.4 | 82.1 | 80.4 | 79.9 | 84.5 | 144.7 |
| 63000 | 74.5 | 75.4 | 77.2 | 75.4 | 74.8 | 76.0 | 74.2 | 80.4 | 77.4 | 76.1 | 73.7 | 79.1 | 143.3 | |
| 80000 | 67.0 | 67.7 | 67.4 | 68.6 | 68.4 | 68.2 | 67.9 | 67.8 | 70.6 | 67.6 | 68.3 | 69.2 | 141.7 | |
| 0ASPL | 110.2 | 110.4 | 111.2 | 110.1 | 111.1 | 111.6 | 111.0 | 112.7 | 116.7 | 120.4 | 119.1 | 116.6 | 116.4 | 159.0 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 387.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 40.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 03-10-78 | TAPE NO. | N301 | ALPHA | 3559 | TAPB | 33.00 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. ROG. | ADH167 | PAMB | 29.2850 | RELHUM | 62.70 |

| MODEL | TEST POINT | 12.2 M (40.0 FT) | ARC | 177.7 SQ CM (27.55 SQ IN) | MODEL | 117.96 M/SEC (387.0 FPS) |
|-------|------------|-------------------|-----|----------------------------|-------|---------------------------|
| 0400 | 0406 | | | | | |

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X04065

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 66.7 | 66.3 | 69.2 | 68.8 | 69.5 | 70.0 | 70.3 | 70.6 | 75.2 | 83.6 | 84.5 | 82.3 | 74.8 | 158.7 |
| 63 | 67.4 | 66.7 | 69.5 | 68.7 | 70.7 | 70.7 | 71.2 | 72.0 | 78.0 | 85.1 | 84.3 | 80.8 | 72.9 | 158.7 |
| 80 | 68.5 | 69.1 | 70.6 | 70.2 | 77.4 | 72.4 | 72.7 | 73.7 | 79.6 | 85.9 | 84.4 | 78.9 | 72.4 | 159.2 |
| 100 | 71.5 | 72.9 | 73.9 | 72.4 | 72.7 | 74.0 | 74.0 | 75.4 | 82.0 | 87.0 | 83.9 | 77.1 | 72.6 | 159.7 |
| 125 | 71.3 | 70.7 | 72.8 | 73.3 | 73.3 | 75.1 | 74.9 | 76.3 | 82.6 | 86.4 | 85.1 | 76.2 | 71.8 | 159.9 |
| 160 | 72.2 | 71.2 | 74.3 | 73.4 | 74.9 | 76.2 | 76.0 | 77.9 | 82.9 | 86.9 | 84.1 | 76.5 | 71.6 | 160.2 |
| 200 | 71.3 | 73.6 | 75.5 | 74.7 | 75.6 | 77.2 | 77.2 | 78.9 | 84.1 | 86.8 | 82.8 | 74.5 | 71.5 | 160.4 |
| 250 | 73.0 | 72.5 | 74.7 | 74.9 | 75.1 | 76.6 | 77.8 | 79.2 | 83.8 | 87.1 | 83.0 | 75.2 | 71.7 | 160.9 |
| 315 | 71.5 | 72.5 | 74.6 | 74.6 | 76.3 | 77.7 | 78.8 | 80.2 | 85.1 | 86.6 | 82.7 | 76.5 | 71.5 | 161.4 |
| 400 | 71.7 | 73.6 | 75.0 | 75.1 | 76.6 | 78.4 | 78.9 | 81.3 | 84.8 | 86.6 | 83.2 | 75.3 | 71.8 | 162.1 |
| 500 | 71.7 | 73.3 | 75.1 | 75.6 | 76.6 | 78.5 | 79.3 | 81.5 | 84.5 | 86.6 | 83.2 | 76.4 | 71.8 | 162.6 |
| 630 | 72.8 | 73.6 | 75.6 | 75.7 | 77.4 | 79.5 | 80.3 | 82.1 | 84.4 | 86.4 | 82.3 | 76.0 | 71.5 | 163.1 |
| 800 | 74.5 | 76.1 | 78.0 | 76.4 | 78.6 | 80.2 | 80.0 | 81.6 | 84.1 | 85.4 | 81.0 | 74.1 | 69.7 | 163.3 |
| 1000 | 75.1 | 77.4 | 79.3 | 77.6 | 80.0 | 80.5 | 79.8 | 81.1 | 83.3 | 84.5 | 79.5 | 73.8 | 68.4 | 163.5 |
| 1250 | 74.8 | 78.5 | 80.2 | 79.9 | 82.0 | 82.1 | 79.8 | 81.4 | 81.6 | 82.9 | 77.5 | 72.1 | 67.0 | 164.0 |
| 1600 | 72.2 | 75.8 | 80.4 | 80.7 | 81.1 | 81.2 | 79.8 | 79.4 | 81.2 | 82.3 | 76.3 | 70.8 | 66.2 | 164.7 |
| 2000 | 70.7 | 74.6 | 77.6 | 78.9 | 79.7 | 81.1 | 78.7 | 78.9 | 79.9 | 79.0 | 73.2 | 68.2 | 61.6 | 164.7 |
| 2500 | 67.6 | 72.4 | 75.7 | 76.4 | 78.7 | 78.6 | 75.9 | 76.3 | 75.1 | 72.2 | 65.8 | 60.1 | 53.5 | 163.9 |
| 3150 | 66.9 | 66.9 | 70.8 | 72.1 | 75.2 | 75.6 | 70.8 | 69.2 | 72.8 | 70.7 | 63.2 | 53.8 | 43.5 | 164.2 |
| 4000 | 50.3 | 58.2 | 63.2 | 64.8 | 66.0 | 66.4 | 65.3 | 64.5 | 65.8 | 61.4 | 52.6 | 40.5 | 24.8 | 163.2 |
| 5000 | 35.2 | 43.6 | 51.6 | 55.8 | 59.9 | 60.4 | 55.4 | 55.0 | 54.9 | 47.0 | 37.1 | 21.9 | | 163.0 |
| 6300 | 14.5 | 25.8 | 36.1 | 40.6 | 42.2 | 42.9 | 40.8 | 37.1 | 38.1 | 26.5 | 12.9 | | | 161.7 |
| 10000 | | | 5.8 | 14.1 | 15.9 | 16.4 | 16.5 | 11.1 | 10.8 | | | | | 158.7 |

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|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|------|------|------|-------|
| OASPL | 84.5 | 86.5 | 88.8 | 88.7 | 90.3 | 91.1 | 90.5 | 91.6 | 95.2 | 98.0 | 95.0 | 89.1 | 83.6 | 176.0 |
| PWL | 92.1 | 95.3 | 96.5 | 98.8 | 100.5 | 101.2 | 99.6 | 100.3 | 102.5 | 103.7 | 99.3 | 92.6 | 87.3 | |
| PNLT | 92.1 | 95.8 | 99.3 | 99.4 | 101.6 | 102.4 | 100.1 | 100.3 | 103.1 | 103.7 | 99.3 | 92.6 | 87.3 | |

DIAMETER RATIO 7.129 FREQUENCY SHIFT -9

TEST DATE 03-10-78 TAPE NO. N301 ALPHA 3859 TAMB 33.00
LOCATION C41 ANECH CH AERO. RDG. ADH167 PAMS 29.2650 RELHUM 62.70

MODEL TEST POINT 0406 ACOUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.96 M/SEC (387.0 FPS)
FREE-JET SPEED

07/19/79 17.710

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X04070
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

FREQ

30

63

80

100

125

160

200

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 85.6 | 89.6 | 89.6 | 90.6 | 91.0 | 92.6 | 95.5 | 97.4 | 99.6 | 106.9 | 111.0 | 114.0 | 113.4 | 147.3 |
| 315 | 87.4 | 89.2 | 90.7 | 91.0 | 92.6 | 94.7 | 96.1 | 97.2 | 101.7 | 109.0 | 112.9 | 115.6 | 113.5 | 148.7 |
| 400 | 88.9 | 90.4 | 91.7 | 91.0 | 92.1 | 94.7 | 96.6 | 98.0 | 103.0 | 112.8 | 115.4 | 116.8 | 114.0 | 150.6 |
| 500 | 89.7 | 91.3 | 93.3 | 93.1 | 93.7 | 96.3 | 97.7 | 99.3 | 104.0 | 113.4 | 116.7 | 117.4 | 114.6 | 151.5 |
| 630 | 90.6 | 92.9 | 93.9 | 94.2 | 95.5 | 97.4 | 98.6 | 101.2 | 105.6 | 113.5 | 116.6 | 116.3 | 116.2 | 152.0 |
| 800 | 94.9 | 92.9 | 95.4 | 96.0 | 95.8 | 98.7 | 100.3 | 102.7 | 107.4 | 113.5 | 116.9 | 118.8 | 116.7 | 152.5 |
| 1000 | 98.7 | 98.5 | 97.6 | 97.6 | 97.6 | 99.8 | 101.1 | 104.1 | 108.5 | 113.1 | 115.7 | 119.4 | 117.3 | 152.6 |
| 1250 | 95.3 | 97.6 | 99.6 | 99.7 | 100.3 | 101.9 | 102.7 | 104.9 | 108.4 | 112.2 | 117.1 | 119.8 | 117.2 | 153.0 |
| 1600 | 97.4 | 95.8 | 97.3 | 97.8 | 99.1 | 101.3 | 102.9 | 105.1 | 109.0 | 112.4 | 116.8 | 119.5 | 118.3 | 152.8 |
| 2000 | 98.9 | 99.4 | 99.6 | 98.7 | 98.5 | 100.6 | 102.5 | 105.9 | 109.9 | 113.0 | 116.9 | 119.1 | 113.1 | 152.2 |
| 2500 | 96.3 | 97.1 | 99.3 | 99.1 | 99.7 | 101.0 | 103.4 | 105.9 | 109.1 | 113.5 | 117.4 | 116.1 | 110.3 | 151.8 |
| 3150 | 97.4 | 98.2 | 98.9 | 98.9 | 99.0 | 101.6 | 103.6 | 106.7 | 109.9 | 114.1 | 117.0 | 114.9 | 109.9 | 151.7 |
| 4000 | 96.7 | 96.9 | 98.6 | 97.9 | 98.7 | 100.8 | 103.2 | 106.6 | 109.1 | 113.5 | 114.9 | 112.6 | 108.3 | 150.4 |
| 5000 | 96.0 | 96.8 | 98.4 | 98.3 | 98.9 | 101.2 | 103.4 | 106.1 | 108.9 | 113.8 | 113.4 | 111.8 | 106.7 | 150.0 |
| 6300 | 94.3 | 97.0 | 98.8 | 99.2 | 99.0 | 101.8 | 103.3 | 105.7 | 108.9 | 113.2 | 112.2 | 109.9 | 106.4 | 149.8 |
| 8000 | 92.3 | 95.8 | 97.9 | 98.5 | 100.0 | 101.4 | 102.5 | 105.3 | 107.9 | 111.3 | 111.2 | 108.6 | 105.1 | 148.8 |
| 10000 | 90.3 | 94.1 | 97.2 | 97.7 | 100.1 | 102.2 | 101.6 | 104.4 | 106.7 | 110.4 | 109.7 | 107.0 | 104.1 | 148.3 |
| 12500 | 87.7 | 91.7 | 94.9 | 96.2 | 98.2 | 100.3 | 100.3 | 102.4 | 104.0 | 107.7 | 106.8 | 104.8 | 101.7 | 146.7 |
| 16000 | 85.5 | 90.2 | 93.7 | 95.5 | 97.7 | 99.4 | 98.4 | 101.0 | 101.8 | 105.8 | 104.8 | 102.5 | 98.9 | 146.3 |
| 20000 | 80.3 | 87.5 | 91.1 | 92.4 | 96.4 | 97.7 | 95.6 | 98.0 | 99.8 | 102.0 | 101.3 | 99.4 | 97.4 | 145.1 |
| 25000 | 78.4 | 84.6 | 87.7 | 88.7 | 93.5 | 95.1 | 92.9 | 92.7 | 95.5 | 97.3 | 97.5 | 95.6 | 94.7 | 143.9 |
| 31500 | 77.2 | 80.0 | 85.2 | 87.2 | 87.7 | 89.3 | 89.2 | 90.0 | 93.0 | 95.6 | 94.5 | 91.0 | 88.5 | 143.5 |
| 40000 | 72.0 | 74.5 | 79.9 | 82.3 | 86.5 | 87.0 | 83.3 | 84.8 | 87.6 | 90.4 | 89.7 | 85.7 | 83.7 | 142.9 |
| 50000 | 65.6 | 69.1 | 72.8 | 75.9 | 78.3 | 79.8 | 79.0 | 82.8 | 84.9 | 83.6 | 80.5 | 78.1 | 141.3 | |
| 63000 | 59.5 | 64.4 | 66.5 | 69.3 | 70.6 | 71.8 | 73.3 | 71.9 | 78.4 | 78.5 | 76.0 | 72.3 | 140.8 | |
| 80000 | 54.0 | 56.4 | 60.2 | 64.4 | 63.3 | 65.4 | 65.2 | 65.7 | 72.9 | 72.1 | 73.1 | 67.9 | 66.4 | 141.5 |
| GASPL | 107.5 | 108.4 | 110.1 | 110.1 | 111.0 | 113.1 | 114.3 | 116.9 | 120.3 | 125.1 | 127.8 | 128.9 | 126.0 | 163.8 |

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TEST DATE 03-10-78 TAPE NO. N301 ALPHA SB59 TAMB 38.30
LOCATION C41 ANECH CH AERO. RDG. ADH161 PAMB 29.4900 RELHUM 32.80

MODEL TEST POINT 0407 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 177.7 SQ CM (27.55 SQ IN) - MODEL 0. FREE-JET SPEED 0. M/SEC (0. FPS)

07/19/79 17.710

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FM03L X04070

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 85.8 | 89.8 | 89.8 | 90.6 | 91.0 | 92.6 | 95.5 | 97.4 | 99.6 | 106.9 | 111.0 | 114.0 | 113.4 | 147.3 |
| 315 | 87.4 | 89.2 | 90.7 | 91.0 | 92.6 | 94.7 | 96.1 | 97.2 | 101.7 | 109.0 | 112.9 | 115.6 | 113.5 | 148.7 |
| 400 | 88.9 | 90.4 | 91.7 | 91.0 | 92.1 | 94.7 | 96.6 | 98.0 | 103.0 | 112.8 | 115.4 | 116.8 | 114.0 | 150.6 |
| 500 | 89.7 | 91.3 | 93.3 | 93.1 | 93.7 | 96.3 | 97.7 | 99.3 | 104.0 | 113.4 | 116.7 | 117.4 | 114.6 | 151.5 |
| 630 | 90.8 | 92.9 | 93.9 | 94.2 | 95.5 | 97.4 | 98.8 | 101.2 | 105.6 | 113.5 | 116.6 | 118.3 | 116.2 | 152.0 |
| 800 | 94.9 | 92.9 | 95.4 | 96.0 | 95.8 | 98.7 | 100.3 | 102.7 | 107.4 | 113.5 | 116.9 | 118.8 | 116.7 | 152.5 |
| 1000 | 98.7 | 98.5 | 99.3 | 97.6 | 97.6 | 99.6 | 101.1 | 104.1 | 108.5 | 113.1 | 115.7 | 119.4 | 117.3 | 152.6 |
| 1250 | 95.3 | 97.6 | 99.6 | 99.7 | 100.3 | 101.9 | 102.7 | 104.9 | 108.4 | 112.2 | 117.1 | 119.8 | 117.2 | 153.0 |
| 1600 | 97.4 | 95.8 | 97.3 | 97.8 | 99.1 | 101.3 | 102.9 | 105.1 | 109.0 | 112.4 | 116.8 | 119.5 | 116.3 | 152.8 |
| 2000 | 98.9 | 99.4 | 99.6 | 98.7 | 98.5 | 100.6 | 102.5 | 105.9 | 109.9 | 113.0 | 116.9 | 117.9 | 113.1 | 152.2 |
| 2500 | 96.3 | 97.1 | 99.3 | 99.1 | 99.7 | 101.0 | 103.3 | 105.7 | 109.1 | 113.5 | 117.4 | 116.1 | 110.3 | 151.8 |
| 3150 | 97.4 | 98.2 | 98.9 | 98.9 | 99.0 | 101.6 | 103.8 | 106.7 | 109.9 | 114.1 | 117.0 | 114.9 | 109.9 | 151.7 |
| 4000 | 96.7 | 96.9 | 98.6 | 97.9 | 98.7 | 100.8 | 103.2 | 106.6 | 109.1 | 113.5 | 114.9 | 112.6 | 108.3 | 150.4 |
| 5000 | 96.0 | 96.8 | 98.4 | 98.3 | 98.9 | 101.2 | 103.4 | 106.1 | 108.9 | 113.4 | 113.4 | 111.6 | 106.7 | 150.0 |
| 6300 | 94.3 | 97.0 | 98.8 | 99.2 | 99.0 | 101.6 | 103.3 | 105.7 | 108.9 | 113.2 | 112.2 | 109.9 | 106.4 | 149.6 |
| 8000 | 92.3 | 95.8 | 97.9 | 98.5 | 100.0 | 101.4 | 102.5 | 105.3 | 107.9 | 111.3 | 111.2 | 108.6 | 105.1 | 148.8 |
| 10000 | 90.3 | 94.1 | 97.2 | 97.7 | 100.1 | 102.2 | 101.6 | 104.4 | 106.7 | 110.4 | 109.7 | 107.0 | 104.1 | 148.3 |
| 12500 | 87.7 | 91.7 | 94.9 | 96.2 | 98.2 | 100.3 | 100.3 | 102.4 | 104.0 | 107.7 | 106.8 | 104.8 | 101.7 | 146.7 |
| 16000 | 85.5 | 90.2 | 93.7 | 95.5 | 97.7 | 99.4 | 98.4 | 101.0 | 101.8 | 105.8 | 104.8 | 102.5 | 98.9 | 146.3 |
| 20000 | 80.3 | 87.5 | 91.1 | 92.4 | 96.4 | 97.7 | 95.6 | 98.0 | 99.8 | 102.0 | 101.3 | 99.4 | 97.4 | 145.1 |
| 25000 | 79.4 | 84.6 | 87.7 | 88.7 | 93.5 | 95.1 | 92.9 | 92.7 | 96.5 | 97.3 | 97.5 | 95.6 | 94.7 | 143.9 |
| 31500 | 77.2 | 80.0 | 85.2 | 87.2 | 87.7 | 89.3 | 89.2 | 90.0 | 93.0 | 95.6 | 94.3 | 91.0 | 88.5 | 143.5 |
| 40000 | 72.0 | 74.5 | 79.9 | 82.3 | 86.5 | 87.0 | 83.3 | 84.8 | 87.6 | 90.4 | 89.7 | 85.7 | 83.7 | 142.9 |
| 50000 | 65.6 | 69.1 | 72.8 | 75.9 | 78.3 | 79.8 | 79.0 | 78.0 | 82.8 | 84.9 | 83.6 | 80.5 | 78.1 | 141.3 |
| 63000 | 59.5 | 64.4 | 66.5 | 69.3 | 70.6 | 71.8 | 73.3 | 71.9 | 78.4 | 78.5 | 78.3 | 76.0 | 72.3 | 140.8 |
| 80000 | 54.0 | 56.4 | 60.2 | 64.4 | 63.3 | 65.4 | 65.2 | 65.7 | 72.9 | 72.1 | 73.1 | 67.9 | 66.4 | 141.5 |
| GASPL | 107.5 | 108.4 | 110.1 | 110.1 | 111.0 | 113.1 | 114.3 | 116.9 | 120.3 | 125.1 | 127.8 | 128.9 | 126.0 | 163.8 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 0. | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|-------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 03-10-78 | TAPE NO. | N301 | ALPHA | SB59 | TAMB | 38.30 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERD. RDG. | ADH161 | PAMB | 29.4900 | RELHUM | 32.80 |

| MODEL | TEST POINT | ACQUSTIC RANGE | ARC | 177.7 SQ CM (27.55 SQ IN) - MODEL | 0. | FREE-JET SPEED | M/SEC (0. FPS) |
|-------|------------|-------------------|-----|------------------------------------|----|-----------------|-----------------|
| 0400 | 0407 | 12.2 M (40.0 FT) | ARC | 177.7 SQ CM (27.55 SQ IN) - MODEL | 0. | M/SEC (0. FPS) | |

07/19/79 17.710

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X04075

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 66.5 | 69.6 | 71.9 | 71.9 | 73.4 | 76.2 | 77.9 | 78.9 | 83.2 | 91.9 | 93.0 | 92.3 | 86.1 | 167.7 |
| 63 | 67.3 | 70.4 | 73.5 | 74.0 | 75.0 | 77.7 | 79.0 | 80.2 | 84.2 | 92.5 | 94.3 | 92.8 | 86.6 | 168.5 |
| 80 | 68.4 | 72.0 | 74.1 | 75.1 | 76.8 | 78.6 | 80.1 | 82.1 | 85.8 | 92.5 | 94.1 | 93.6 | 88.1 | 169.1 |
| 100 | 72.3 | 71.9 | 75.5 | 76.6 | 77.1 | 80.1 | 81.5 | 83.5 | 87.5 | 92.5 | 94.3 | 94.0 | 88.5 | 169.5 |
| 125 | 76.0 | 77.4 | 79.3 | 78.3 | 78.6 | 81.1 | 82.3 | 84.6 | 88.5 | 92.0 | 93.1 | 94.5 | 88.6 | 169.7 |
| 160 | 72.5 | 76.4 | 79.5 | 80.3 | 81.3 | 83.1 | 83.8 | 85.5 | 88.3 | 91.0 | 94.2 | 94.6 | 88.3 | 170.1 |
| 200 | 74.3 | 74.3 | 77.0 | 78.3 | 80.1 | 82.3 | 83.8 | 85.5 | 88.7 | 90.9 | 93.7 | 94.0 | 87.0 | 169.9 |
| 250 | 75.4 | 77.7 | 79.1 | 78.9 | 79.2 | 81.5 | 83.2 | 86.2 | 89.4 | 91.3 | 93.5 | 92.0 | 83.2 | 169.2 |
| 315 | 72.4 | 75.0 | 78.5 | 79.1 | 80.1 | 81.6 | 83.9 | 85.8 | 88.3 | 91.4 | 93.5 | 89.6 | 79.6 | 168.8 |
| 400 | 73.0 | 75.7 | 77.8 | 78.6 | 79.1 | 81.9 | 83.9 | 86.3 | 88.6 | 91.6 | 92.6 | 87.8 | 78.1 | 168.8 |
| 500 | 71.9 | 74.0 | 77.1 | 77.2 | 78.5 | 80.6 | 83.0 | 86.0 | 87.6 | 90.7 | 90.1 | 84.8 | 75.5 | 167.5 |
| 630 | 70.6 | 73.6 | 76.5 | 77.4 | 78.5 | 81.0 | 83.0 | 85.1 | 87.0 | 90.6 | 88.1 | 83.3 | 72.9 | 167.1 |
| 800 | 68.5 | 73.4 | 76.8 | 78.0 | 78.3 | 81.3 | 82.8 | 84.5 | 86.7 | 89.6 | 86.4 | 80.8 | 71.4 | 166.6 |
| 1000 | 66.1 | 71.9 | 75.6 | 77.1 | 79.2 | 80.6 | 81.7 | 84.0 | 85.5 | 87.4 | 85.0 | 78.7 | 69.0 | 165.8 |
| 1250 | 63.6 | 69.8 | 74.6 | 76.2 | 79.1 | 81.5 | 80.7 | 82.9 | 84.1 | 86.2 | 83.0 | 76.3 | 66.5 | 165.4 |
| 1600 | 60.1 | 66.9 | 71.8 | 74.3 | 76.9 | 79.3 | 79.0 | 80.5 | 81.0 | 82.9 | 79.2 | 72.8 | 61.8 | 163.8 |
| 2000 | 56.9 | 64.7 | 70.3 | 73.4 | 76.3 | 78.2 | 77.0 | 78.9 | 78.4 | 80.4 | 76.2 | 69.9 | 56.0 | 163.3 |
| 2500 | 49.9 | 60.8 | 66.8 | 69.6 | 74.4 | 76.0 | 73.6 | 75.2 | 75.5 | 75.3 | 70.9 | 63.0 | 49.6 | 162.2 |
| 3150 | 45.7 | 55.5 | 61.5 | 64.3 | 70.2 | 72.1 | 69.6 | 68.4 | 70.3 | 68.2 | 63.8 | 54.2 | 38.5 | 160.9 |
| 4000 | 37.2 | 46.2 | 55.2 | 59.6 | 61.4 | 63.4 | 62.9 | 62.4 | 63.0 | 61.8 | 54.3 | 40.6 | 17.8 | 160.6 |
| 5000 | 22.2 | 33.1 | 43.7 | 49.3 | 55.2 | 56.2 | 52.0 | 51.6 | 51.4 | 49.0 | 40.0 | 21.7 | 160.0 | |
| 6300 | | 13.5 | 24.5 | 32.1 | 36.9 | 39.2 | 37.6 | 34.2 | 34.5 | 29.3 | 16.0 | | 156.4 | |
| 8000 | | | | 6.2 | 11.1 | 13.4 | 13.8 | 8.9 | 6.7 | | | | 157.9 | |
| 10000 | | | | | | | | | | | | | 156.8 | |

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OF POOR QUALITY

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| OASPL | 83.7 | 86.1 | 88.9 | 89.6 | 90.9 | 93.2 | 94.4 | 96.5 | 99.2 | 102.9 | 104.2 | 103.1 | 96.6 | 160.7 |
| PNL | 87.4 | 91.0 | 94.4 | 96.4 | 98.7 | 100.8 | 100.8 | 102.6 | 104.7 | 107.5 | 107.5 | 104.8 | 96.9 | |
| PNLT | 86.0 | 91.5 | 94.4 | 96.4 | 100.1 | 101.9 | 101.3 | 102.6 | 104.7 | 107.5 | 108.6 | 104.8 | 97.9 | |

DIAMETER RATIO 7.129 FREQUENCY SHIFT -9

TEST DATE 03-10-78 TAPE NO. N301 ALPHA 3859 TAMB 38.30
LOCATION C41 ANECH CH AERO. RDG. ADH161 PAMB 29.4900 RELNUM 32.80

MODEL TEST POINT 0407 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 0. FREE-JET SPEED (0. FPS)

07/19/79 17.710

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X04080
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

104.5

105.6

107.1

107.2

108.5

110.0

110.8

114.0

117.2

122.1

122.7

119.8

114.7

159.1

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250 82.0 84.8 85.4 86.7 87.0 88.4 90.9 93.0 95.2 102.9 107.5 110.7 109.9 143.6
315 83.5 85.0 86.6 87.7 90.1 91.0 92.6 96.9 105.2 109.6 111.8 109.2 144.9
400 85.3 86.1 87.0 88.9 89.5 90.4 91.8 93.7 98.2 108.3 111.4 112.6 106.5 146.1
500 85.7 86.7 88.8 89.8 91.7 93.4 95.3 99.8 110.1 113.2 111.7 102.8 146.9
630 86.3 87.8 89.3 89.1 98.0 92.8 94.2 97.4 101.9 110.4 113.6 110.5 99.4 147.1
800 89.1 87.3 90.6 90.9 91.5 93.9 95.3 99.2 103.1 110.7 112.9 107.5 97.2 146.5
1000 89.2 88.4 91.0 90.5 92.3 94.7 96.4 99.8 104.2 110.3 111.2 104.4 95.3 145.5
1250 88.8 90.3 92.8 92.4 93.2 96.6 97.2 100.9 104.6 110.2 110.8 102.7 93.9 145.4
1600 90.3 89.7 92.0 92.5 93.6 96.2 98.1 101.5 105.5 109.8 110.0 101.0 93.5 145.2
2000 89.3 89.8 91.8 91.8 93.4 96.4 98.9 101.8 106.1 110.2 108.9 100.8 93.6 145.1
2500 89.7 90.5 92.2 92.7 93.6 96.4 99.3 102.7 106.2 110.6 109.3 101.2 94.2 145.6
3150 90.5 91.0 92.3 93.0 94.4 97.0 99.8 103.8 106.8 110.4 109.8 103.0 95.0 146.0
4000 92.4 92.2 93.2 92.9 94.0 96.9 99.3 103.5 106.5 109.9 109.5 102.7 95.9 145.7
5000 95.6 95.2 95.7 94.9 94.7 97.4 99.7 103.7 106.2 110.9 109.0 102.1 95.4 146.2
6300 97.3 97.7 97.9 95.9 96.1 98.5 99.9 103.1 106.5 109.9 107.6 101.1 95.0 146.0
8000 96.6 98.8 99.7 99.0 97.8 99.0 100.0 102.6 106.2 109.1 106.3 100.1 93.9 145.9
10000 93.0 95.8 98.6 99.4 100.0 100.6 99.5 102.4 104.4 107.6 104.7 99.1 93.0 145.6
12500 91.2 92.6 95.2 97.0 98.7 99.9 98.8 101.0 102.4 105.4 102.1 97.3 91.5 144.4
16000 90.7 92.4 94.8 95.5 97.4 99.3 98.1 99.5 100.8 103.9 100.6 96.2 91.1 144.5
20000 85.1 89.9 91.9 93.2 96.4 97.5 95.2 96.8 98.9 100.5 97.1 93.7 89.9 143.7
25000 83.3 86.6 88.6 89.3 94.1 95.3 92.8 93.1 96.5 96.2 97.5 90.8 88.8 143.5
31500 82.1 82.0 86.5 88.2 88.4 89.4 89.6 90.5 93.3 94.5 90.6 86.1 83.4 142.9
40000 76.9 76.6 81.2 82.8 87.0 87.4 84.5 85.9 88.2 87.9 85.1 80.7 78.9 142.3
50000 69.6 71.3 73.4 76.2 78.8 79.8 79.8 79.3 82.9 81.4 78.9 75.7 72.8 140.2
63000 63.8 65.5 66.9 69.6 70.9 71.6 73.3 72.3 77.8 73.6 71.9 68.7 66.6 138.9
80000 58.1 56.9 61.2 63.7 63.4 66.0 64.8 65.8 70.9 67.4 65.8 60.2 58.6 138.9

TEST DATE 03-10-78 TAPE NO. N301 ALPHA SB59 TAMB 34.00
LOCATION C41 ANECH CH AERO. RDG. ADH164 PAMB 29.2550 RELHUM 52.50

MODEL TEST POINT 0408 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 177.7 SQ CM (27.55 SQ IN) - MODEL 117.96 M/SEC (387.0 FPS) FREE-JET SPEED

07/19/79 17.710

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 35 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X04080

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 89.3 | 90.8 | 89.9 | 89.8 | 88.5 | 88.4 | 89.0 | 89.5 | 93.5 | 101.0 | 104.9 | 107.5 | 106.7 | 141.1 |
| 315 | 89.3 | 90.8 | 89.9 | 89.8 | 88.4 | 88.4 | 89.0 | 89.5 | 93.5 | 101.0 | 104.9 | 107.5 | 106.7 | 141.1 |
| 400 | 90.9 | 91.2 | 91.3 | 89.9 | 90.2 | 90.6 | 91.0 | 92.0 | 97.5 | 107.4 | 110.6 | 110.6 | 105.4 | 145.0 |
| 500 | 91.9 | 91.7 | 91.4 | 90.0 | 92.7 | 92.0 | 92.4 | 93.1 | 99.7 | 107.9 | 111.2 | 110.2 | 103.9 | 145.2 |
| 630 | 93.1 | 92.9 | 93.7 | 92.1 | 100.4 | 93.2 | 93.2 | 95.1 | 101.3 | 108.5 | 111.0 | 108.4 | 104.1 | 145.3 |
| 800 | 96.4 | 96.2 | 95.8 | 93.6 | 93.4 | 94.3 | 94.3 | 95.9 | 102.6 | 108.6 | 110.0 | 106.4 | 104.6 | 144.8 |
| 1000 | 96.3 | 93.4 | 95.4 | 94.3 | 94.4 | 95.5 | 95.5 | 97.6 | 103.2 | 108.4 | 109.5 | 104.5 | 102.8 | 144.4 |
| 1250 | 96.6 | 94.7 | 95.9 | 94.0 | 95.4 | 97.3 | 96.5 | 98.8 | 104.3 | 108.2 | 108.8 | 102.8 | 102.2 | 144.3 |
| 1600 | 96.2 | 96.6 | 97.8 | 96.0 | 95.9 | 97.2 | 97.6 | 99.7 | 105.1 | 108.8 | 107.9 | 102.9 | 102.5 | 144.6 |
| 2000 | 97.7 | 96.0 | 97.0 | 96.2 | 96.0 | 97.0 | 97.7 | 100.3 | 105.7 | 109.7 | 108.8 | 103.8 | 103.8 | 145.3 |
| 2500 | 96.6 | 96.1 | 98.9 | 95.7 | 96.6 | 97.9 | 99.4 | 101.5 | 106.9 | 110.2 | 110.2 | 106.6 | 105.9 | 146.4 |
| 3150 | 97.0 | 96.8 | 97.5 | 96.7 | 97.5 | 98.9 | 100.4 | 103.1 | 107.3 | 110.4 | 110.7 | 107.1 | 107.6 | 147.1 |
| 4000 | 97.8 | 97.4 | 97.6 | 97.2 | 97.5 | 99.3 | 100.4 | 103.4 | 107.1 | 111.4 | 109.9 | 106.1 | 106.5 | 147.2 |
| 5000 | 98.6 | 98.7 | 98.7 | 97.4 | 98.5 | 100.4 | 101.3 | 103.6 | 107.6 | 110.5 | 108.7 | 105.3 | 108.4 | 147.0 |
| 6300 | 101.2 | 100.6 | 100.6 | 99.2 | 99.7 | 101.5 | 101.4 | 103.3 | 107.3 | 109.8 | 107.3 | 104.3 | 105.1 | 146.9 |
| 8000 | 102.1 | 102.3 | 102.2 | 99.7 | 101.6 | 102.0 | 101.5 | 102.6 | 105.9 | 108.8 | 106.3 | 104.0 | 105.1 | 147.0 |
| 10000 | 102.0 | 104.0 | 104.4 | 103.0 | 104.0 | 103.6 | 101.3 | 102.7 | 104.6 | 107.3 | 104.6 | 103.1 | 104.7 | 147.6 |
| 12500 | 99.6 | 101.7 | 103.7 | 103.6 | 103.3 | 102.9 | 100.9 | 101.7 | 104.0 | 106.9 | 104.1 | 103.1 | 105.2 | 147.9 |
| 16000 | 100.0 | 100.2 | 101.4 | 101.7 | 101.9 | 102.3 | 100.3 | 100.6 | 103.4 | 104.8 | 102.1 | 101.8 | 104.6 | 147.9 |
| 20000 | 99.0 | 99.6 | 100.5 | 99.8 | 100.9 | 100.5 | 97.6 | 98.5 | 101.6 | 100.8 | 102.3 | 98.4 | 103.0 | 147.9 |
| 25000 | 92.8 | 96.4 | 97.1 | 96.9 | 98.7 | 98.3 | 95.3 | 95.0 | 98.8 | 99.9 | 96.6 | 95.4 | 99.7 | 147.3 |
| 31500 | 90.2 | 92.4 | 93.0 | 92.3 | 92.4 | 92.4 | 92.0 | 92.0 | 95.2 | 94.6 | 91.9 | 90.3 | 95.0 | 145.9 |
| 40000 | 85.5 | 84.8 | 88.4 | 89.2 | 91.5 | 90.4 | 87.0 | 87.7 | 90.3 | 88.5 | 86.3 | 85.8 | 89.5 | 145.8 |
| 50000 | 82.6 | 81.1 | 84.4 | 84.5 | 83.4 | 82.8 | 82.3 | 81.2 | 86.1 | 81.8 | 80.2 | 79.8 | 84.2 | 144.6 |
| 63000 | 74.3 | 74.9 | 75.6 | 77.0 | 74.9 | 74.6 | 75.8 | 74.2 | 80.5 | 76.9 | 75.9 | 73.6 | 79.0 | 143.1 |
| 80000 | 64.4 | 65.5 | 66.0 | 67.8 | 67.9 | 69.0 | 67.2 | 67.8 | 70.7 | 67.1 | 68.1 | 63.8 | 69.1 | 141.2 |
| GASPL | 111.2 | 111.5 | 112.2 | 111.2 | 112.1 | 112.4 | 111.7 | 113.5 | 117.6 | 121.5 | 121.7 | 119.5 | 118.3 | 160.1 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | 387.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | TAPE NO. | ALPHA | YAPB |
|--------------|------------|---------|--------|
| 03-10-78 | N301 | 3858 | 34.90 |
| LOCATION | AERO. RDG. | PAMB | RELNUM |
| C41 ANECH CH | ADH164 | 29.2550 | 52.50 |

| MODEL | TEST POINT | ACUSTIC RANGE | FREE-JET SPEED |
|-------|------------|-----------------------|---------------------------|
| 0400 | 0408 | 12.2 M (40.0 FT) ARC | 117.96 M/SEC (387.0 FPS) |

07/19/79 17.710

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70. PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X04085

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PNL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 68.5 | 70.3 | 71.5 | 70.8 | 71.5 | 72.1 | 72.3 | 72.9 | 77.7 | 86.8 | 88.2 | 86.0 | 77.5 | 162.0 |
| 63 | 69.5 | 70.8 | 71.6 | 70.9 | 74.0 | 73.5 | 73.7 | 74.0 | 79.9 | 87.0 | 88.8 | 85.6 | 75.9 | 162.3 |
| 80 | 70.6 | 72.0 | 73.8 | 73.0 | 81.7 | 74.6 | 74.5 | 76.0 | 81.5 | 87.6 | 88.5 | 83.7 | 76.0 | 162.3 |
| 100 | 73.8 | 75.2 | 75.9 | 74.4 | 74.7 | 75.7 | 75.6 | 77.8 | 82.9 | 87.6 | 87.5 | 81.7 | 76.4 | 161.9 |
| 125 | 73.6 | 72.4 | 75.5 | 75.1 | 75.6 | 76.6 | 76.7 | 78.4 | 83.2 | 87.3 | 88.8 | 79.6 | 74.3 | 161.4 |
| 160 | 73.7 | 73.5 | 75.8 | 74.6 | 76.4 | 78.5 | 77.6 | 79.5 | 84.2 | 87.0 | 86.0 | 77.6 | 73.4 | 161.3 |
| 200 | 73.1 | 75.1 | 77.5 | 76.4 | 76.8 | 78.2 | 78.5 | 80.1 | 84.8 | 87.4 | 84.8 | 77.4 | 73.2 | 161.6 |
| 250 | 74.3 | 74.3 | 76.5 | 76.5 | 76.7 | 77.8 | 78.4 | 80.5 | 85.2 | 88.0 | 85.4 | 77.9 | 73.9 | 162.4 |
| 315 | 72.8 | 74.1 | 76.1 | 75.7 | 77.0 | 78.5 | 79.8 | 81.5 | 86.0 | 88.1 | 86.3 | 80.1 | 75.1 | 163.5 |
| 400 | 72.7 | 74.4 | 76.3 | 76.4 | 77.6 | 79.2 | 80.5 | 82.7 | 86.1 | 88.0 | 86.3 | 79.9 | 75.8 | 164.1 |
| 500 | 73.0 | 74.6 | 76.1 | 76.6 | 77.4 | 79.3 | 80.2 | 82.7 | 85.6 | 88.5 | 85.1 | 78.3 | 73.7 | 164.2 |
| 630 | 74.3 | 75.4 | 76.9 | 76.5 | 78.1 | 80.1 | 80.8 | 82.9 | 85.7 | 87.2 | 83.3 | 76.8 | 72.6 | 164.1 |
| 800 | 75.4 | 77.0 | 78.5 | 78.0 | 79.1 | 81.0 | 80.8 | 82.1 | 85.1 | 86.1 | 81.5 | 75.1 | 70.2 | 164.0 |
| 1000 | 75.8 | 78.4 | 79.8 | 78.3 | 80.8 | 81.3 | 80.7 | 81.4 | 83.6 | 84.8 | 80.0 | 74.1 | 69.0 | 164.1 |
| 1250 | 75.3 | 79.8 | 81.8 | 81.5 | 83.0 | 82.9 | 80.3 | 81.2 | 82.0 | 83.0 | 77.9 | 72.5 | 67.1 | 164.7 |
| 1600 | 71.9 | 76.8 | 80.7 | 81.7 | 82.0 | 81.8 | 79.7 | 79.9 | 81.0 | 82.0 | 76.5 | 71.1 | 65.3 | 164.9 |
| 2000 | 71.4 | 74.7 | 78.0 | 79.6 | 80.5 | 81.2 | 78.9 | 78.5 | 80.0 | 79.4 | 73.5 | 68.1 | 61.9 | 165.0 |
| 2500 | 68.7 | 72.9 | 76.3 | 77.0 | 79.0 | 78.8 | 75.6 | 75.7 | 77.3 | 74.1 | 71.9 | 61.9 | 55.2 | 165.0 |
| 3150 | 59.1 | 67.3 | 71.0 | 72.6 | 75.3 | 75.3 | 72.0 | 70.6 | 72.7 | 70.8 | 62.9 | 53.9 | 43.4 | 164.4 |
| 4000 | 50.2 | 58.6 | 63.1 | 64.7 | 66.1 | 66.6 | 65.7 | 64.4 | 65.2 | 60.7 | 52.0 | 40.0 | 24.3 | 163.0 |
| 5000 | 35.8 | 43.4 | 52.2 | 56.2 | 60.2 | 59.7 | 56.7 | 54.7 | 54.1 | 47.1 | 36.5 | 21.8 | | 162.9 |
| 6300 | 15.1 | 25.5 | 36.1 | 40.7 | 42.0 | 42.2 | 40.9 | 37.4 | 37.6 | 26.2 | 12.7 | | | 161.6 |
| 8000 | | | 6.0 | 13.9 | 15.4 | 16.2 | 16.3 | 11.1 | 10.9 | | | | | 160.2 |
| 10000 | | | | | | | | | | | | | | 158.3 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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CASPL 85.7 87.8 90.0 89.9 91.5 91.9 91.3 92.7 96.2 99.1 97.8 92.6 86.2 177.0

PNL 93.0 96.2 99.2 99.7 101.2 101.6 100.2 100.6 103.1 104.5 101.7 95.3 89.8

PNLT 93.0 96.7 100.0 100.4 102.6 102.8 100.7 101.1 103.7 104.5 101.7 95.3 89.8

DIAMETER RATIO 7.129 FREQUENCY SHIFT -9

TEST DATE 03-10-78 TAPE NO. N301 ALPHA SB59 TAMB 34.00
 LOCATION C41 ANECH CH AERG. RDG. ADH164' PAMB 29.2550 RELHUM 52.50

MODEL TEST POINT 0406 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 117.96 M/SEC (387.0 FPS)
 FREE-JET SPEED

07/19/79 17.710

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X04090
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ
50
63
80

100
125
160
200

250 66.5 90.3 91.1 91.4 91.0 93.6 96.2 97.6 100.1 107.6 111.6 114.7 114.4 148.0
315 87.9 88.9 90.7 91.2 93.1 95.2 96.6 98.0 101.9 109.7 113.1 115.6 114.5 149.1
400 89.4 90.2 92.2 92.0 93.3 95.2 96.6 98.5 103.5 113.5 116.2 117.6 114.5 151.3
500 90.0 91.8 94.3 93.3 94.2 96.6 98.4 99.6 104.8 114.9 117.7 118.4 115.3 152.5
630 91.8 93.4 94.6 94.2 96.0 98.1 99.8 101.9 106.4 114.7 116.6 119.0 116.7 153.2
800 95.9 93.6 95.9 96.7 97.0 99.2 100.8 103.2 107.9 115.2 118.9 119.8 117.2 153.8
1000 100.7 100.7 102.0 99.5 98.4 100.6 104.0 108.6 114.1 118.7 119.9 117.3 153.8
1250 96.6 99.9 101.6 101.7 102.2 103.1 103.7 105.9 108.9 114.0 119.3 120.2 116.7 154.1
1600 98.1 96.8 98.8 99.1 100.1 102.0 103.6 105.6 110.0 113.6 119.6 118.5 115.3 153.6
2000 99.3 100.6 100.9 99.4 99.2 100.8 103.2 105.7 110.1 113.5 118.7 116.6 112.1 152.6
2500 97.5 98.3 99.8 99.8 100.4 101.8 103.9 106.6 109.3 114.4 118.4 116.1 110.1 152.3
3150 98.1 99.1 99.7 99.7 102.1 104.2 106.7 110.4 114.1 117.5 113.9 109.4 151.8
4000 97.5 97.3 99.1 98.6 99.4 101.5 102.9 106.8 109.3 114.0 115.6 111.5 107.0 150.7
5000 96.2 97.3 98.8 98.8 99.9 101.7 103.9 106.8 108.6 114.3 114.9 110.2 106.2 150.5
6300 94.1 96.2 99.0 99.2 99.7 102.5 103.5 106.7 108.6 113.4 113.2 109.2 105.3 149.9
8000 93.1 96.0 97.4 98.7 99.5 101.7 103.0 105.6 108.1 111.3 111.7 107.1 104.1 148.8
10000 90.6 94.1 96.9 98.0 100.1 102.2 102.1 104.7 106.5 110.7 110.7 105.5 102.8 148.5
12500 88.0 92.2 94.9 96.4 98.7 100.3 100.8 102.9 104.3 107.7 108.1 103.5 101.0 147.0
16000 85.5 90.7 94.0 95.5 97.9 99.7 98.9 100.8 101.8 105.9 105.8 101.3 99.0 146.4
20000 80.6 88.0 90.6 93.4 96.9 98.2 98.1 98.0 99.5 102.0 102.6 98.7 96.9 145.4
25000 78.9 84.7 87.7 89.2 93.5 94.9 92.0 93.0 96.3 96.6 98.3 94.9 93.5 143.7
31500 77.5 80.5 85.4 88.0 88.3 89.0 89.0 89.5 92.5 95.2 94.8 90.0 87.8 143.3
40000 72.7 74.8 79.9 82.3 86.3 87.0 83.6 84.9 86.9 89.5 90.3 84.3 83.7 142.7
50000 65.6 69.9 72.3 75.7 78.3 79.8 78.8 78.5 81.8 84.2 84.6 79.7 77.4 141.1
63000 60.3 64.2 66.7 69.6 70.4 71.3 72.8 71.5 77.1 78.7 78.3 74.0 72.3 140.4
80000 54.3 56.7 60.5 64.1 63.5 65.7 65.5 65.7 71.0 72.6 73.6 67.0 65.4 141.3
GASPL 108.4 109.4 111.0 110.9 111.7 113.6 114.8 117.3 120.5 125.9 129.4 129.0 126.1 164.5

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TEST DATE 03-10-78 TAPE NO. N301 ALPHA SB59 TAMB 23.00
LOCATION C41 ANECH CH AERO. RDS. ADH162 PAYB 29.4900 RELHUM 37.00

MODEL TEST POINT 0409 12.2 M (40.0 FT) ARC 177.7 SQ CM (27.55 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

349

07/19/79 17.710

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X04090

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | | | | | | | | | | | | | | |
| 315 | 86.5 | 90.3 | 91.1 | 91.4 | 91.0 | 93.6 | 96.2 | 97.6 | 100.1 | 107.6 | 111.5 | 114.7 | 114.4 | 148.0 |
| 400 | 87.9 | 88.9 | 90.7 | 91.2 | 93.1 | 95.2 | 96.6 | 96.6 | 101.9 | 109.7 | 113.1 | 116.8 | 114.5 | 149.1 |
| 500 | 89.4 | 90.2 | 92.2 | 92.0 | 93.3 | 95.2 | 96.6 | 96.5 | 103.5 | 113.5 | 116.2 | 117.6 | 114.5 | 151.3 |
| 630 | 90.0 | 91.8 | 94.3 | 93.3 | 94.2 | 96.8 | 98.4 | 99.6 | 104.8 | 114.9 | 117.7 | 118.4 | 115.3 | 152.5 |
| 800 | 91.8 | 93.4 | 94.6 | 94.2 | 96.0 | 98.1 | 99.8 | 101.9 | 106.4 | 114.7 | 118.6 | 119.0 | 116.7 | 153.2 |
| 1000 | 93.6 | 95.9 | 96.7 | 97.0 | 99.2 | 100.6 | 103.2 | 107.9 | 115.2 | 118.9 | 119.6 | 117.2 | 115.3 | 153.6 |
| 1250 | 95.9 | 98.4 | 99.5 | 98.4 | 100.5 | 101.6 | 104.0 | 108.8 | 114.1 | 118.7 | 119.9 | 117.3 | 115.3 | 153.8 |
| 1600 | 96.6 | 99.9 | 101.6 | 101.7 | 102.2 | 103.1 | 103.7 | 105.9 | 108.9 | 114.0 | 119.3 | 120.2 | 116.7 | 154.1 |
| 2000 | 98.1 | 96.8 | 98.8 | 99.1 | 100.1 | 102.0 | 103.6 | 105.6 | 110.0 | 113.6 | 119.6 | 118.8 | 115.3 | 153.6 |
| 2500 | 99.3 | 100.6 | 100.9 | 99.4 | 99.2 | 100.8 | 103.2 | 105.7 | 110.1 | 113.5 | 118.7 | 116.6 | 112.1 | 152.6 |
| 3150 | 97.5 | 98.3 | 99.8 | 99.8 | 100.4 | 101.8 | 103.9 | 106.6 | 109.3 | 114.4 | 118.4 | 115.1 | 110.1 | 152.3 |
| 4000 | 98.1 | 99.1 | 99.7 | 99.7 | 99.7 | 102.1 | 104.2 | 106.7 | 110.4 | 114.1 | 117.5 | 113.9 | 109.4 | 151.8 |
| 5000 | 97.5 | 97.3 | 99.1 | 98.6 | 99.4 | 101.5 | 102.9 | 106.8 | 109.3 | 114.0 | 115.6 | 111.5 | 107.0 | 150.7 |
| 6300 | 96.2 | 97.3 | 98.8 | 98.8 | 99.9 | 101.7 | 103.9 | 106.8 | 108.6 | 114.3 | 114.9 | 110.2 | 106.2 | 150.5 |
| 8000 | 94.1 | 96.2 | 99.0 | 99.2 | 99.7 | 102.5 | 103.5 | 106.7 | 108.6 | 113.4 | 113.2 | 109.2 | 106.3 | 149.9 |
| 10000 | 93.1 | 96.0 | 97.4 | 98.7 | 99.5 | 101.7 | 103.0 | 105.6 | 108.1 | 111.3 | 111.7 | 107.1 | 104.1 | 148.8 |
| 12500 | 90.6 | 94.1 | 96.9 | 98.0 | 100.1 | 102.2 | 102.1 | 104.7 | 106.5 | 110.7 | 110.7 | 105.5 | 102.8 | 148.5 |
| 16000 | 88.0 | 92.2 | 94.9 | 96.4 | 98.7 | 100.3 | 100.8 | 102.9 | 104.3 | 107.7 | 108.1 | 103.6 | 101.0 | 147.0 |
| 20000 | 85.5 | 90.7 | 94.0 | 95.3 | 97.9 | 99.7 | 98.9 | 100.8 | 101.8 | 105.9 | 105.8 | 101.3 | 99.0 | 146.4 |
| 25000 | 80.6 | 88.0 | 90.6 | 93.4 | 96.9 | 98.2 | 96.1 | 98.0 | 99.5 | 102.0 | 102.6 | 98.7 | 96.9 | 145.4 |
| 31500 | 78.9 | 84.7 | 87.7 | 89.2 | 93.5 | 94.9 | 92.0 | 93.0 | 96.3 | 96.6 | 98.3 | 94.9 | 93.5 | 143.7 |
| 40000 | 77.5 | 80.5 | 85.4 | 88.0 | 88.3 | 89.0 | 89.0 | 89.5 | 92.5 | 95.2 | 94.6 | 90.0 | 87.8 | 143.3 |
| 50000 | 72.7 | 74.8 | 79.9 | 82.3 | 86.3 | 87.0 | 83.6 | 84.9 | 86.9 | 89.5 | 90.3 | 84.3 | 83.7 | 142.7 |
| 63000 | 65.6 | 69.9 | 72.3 | 75.7 | 78.3 | 79.8 | 78.8 | 78.5 | 81.8 | 84.2 | 84.6 | 79.7 | 77.4 | 141.1 |
| 80000 | 60.3 | 64.2 | 66.7 | 69.6 | 70.4 | 71.3 | 72.8 | 71.5 | 77.1 | 78.7 | 78.3 | 74.0 | 72.3 | 140.4 |
| | 54.3 | 56.7 | 60.5 | 64.1 | 63.5 | 65.7 | 65.5 | 65.7 | 71.0 | 72.8 | 73.6 | 67.0 | 65.4 | 141.3 |
| GASPL | 108.4 | 109.4 | 111.0 | 110.9 | 111.7 | 113.6 | 114.8 | 117.3 | 120.5 | 125.9 | 129.4 | 129.0 | 126.1 | 164.5 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 0. | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|-------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 03-10-78 | TAPE NO. | N301 | ALPHA | 3859 | YAMB | 36.00 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH162 | PAMB | 29.4900 | RELHUM | 37.00 |

| MODEL | TEST POINT | ACOUSTIC RANGE | ARC | 177.7 SQ CH | SIZE | 27.55 SQ IN | - MODEL | FREE-JET SPEED |
|-------|------------|-------------------|-----|-------------|------|-----------------|---------|----------------|
| 0400 | 0409 | 12.2 M (40.0 FT) | ARC | | O. | M/SEC (O. FPS) | | |

07/19/79 17.710

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X04095

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 67.0 | 69.3 | 72.4 | 72.9 | 74.7 | 76.7 | 77.9 | 79.4 | 83.7 | 92.7 | 93.6 | 93.0 | 86.6 | 168.4 |
| 63 | 67.6 | 70.9 | 74.5 | 74.2 | 75.6 | 78.2 | 79.7 | 80.5 | 85.0 | 94.0 | 95.3 | 93.8 | 87.4 | 169.6 |
| 80 | 69.4 | 72.5 | 74.8 | 75.1 | 77.3 | 79.6 | 81.1 | 82.8 | 86.6 | 93.6 | 96.1 | 94.3 | 88.6 | 170.3 |
| 100 | 73.3 | 72.7 | 76.0 | 77.5 | 78.3 | 80.5 | 82.0 | 84.0 | 88.0 | 94.3 | 96.3 | 95.0 | 89.0 | 170.9 |
| 125 | 78.0 | 79.7 | 82.0 | 80.3 | 79.6 | 81.6 | 82.8 | 84.6 | 88.6 | 93.0 | 96.1 | 94.9 | 88.6 | 170.6 |
| 160 | 73.7 | 78.6 | 81.5 | 82.3 | 83.3 | 84.3 | 84.8 | 86.5 | 88.8 | 92.7 | 96.5 | 95.1 | 87.8 | 171.2 |
| 200 | 75.1 | 76.3 | 78.5 | 79.5 | 81.0 | 83.0 | 84.5 | 86.0 | 89.7 | 92.2 | 96.5 | 93.3 | 86.0 | 170.7 |
| 250 | 75.9 | 78.9 | 80.4 | 79.7 | 79.9 | 81.7 | 83.9 | 85.9 | 89.6 | 91.6 | 95.3 | 90.7 | 82.2 | 169.6 |
| 315 | 73.7 | 76.3 | 79.0 | 79.8 | 80.9 | 82.4 | 84.3 | 86.6 | 88.6 | 92.4 | 94.5 | 88.6 | 79.3 | 169.3 |
| 400 | 73.7 | 76.7 | 78.5 | 79.3 | 79.9 | 82.4 | 84.4 | 86.3 | 89.2 | 91.6 | 93.1 | 86.7 | 77.6 | 168.8 |
| 500 | 72.7 | 74.5 | 77.6 | 77.9 | 79.2 | 81.5 | 82.7 | 86.2 | 87.6 | 91.2 | 90.8 | 83.7 | 74.3 | 167.7 |
| 630 | 70.9 | 74.1 | 77.0 | 77.9 | 79.4 | 81.5 | 83.4 | 85.9 | 86.7 | 91.0 | 89.5 | 81.8 | 72.4 | 167.5 |
| 800 | 68.2 | 72.6 | 76.9 | 78.0 | 79.0 | 82.1 | 82.8 | 85.5 | 86.5 | 89.8 | 87.4 | 80.0 | 70.4 | 166.9 |
| 1000 | 66.8 | 72.1 | 75.0 | 77.4 | 78.7 | 81.0 | 82.2 | 84.2 | 85.7 | 87.3 | 85.5 | 77.2 | 68.0 | 165.9 |
| 1250 | 63.8 | 69.8 | 74.3 | 76.4 | 79.1 | 81.5 | 81.2 | 83.1 | 83.9 | 86.4 | 84.0 | 74.8 | 65.3 | 165.6 |
| 1600 | 60.3 | 67.4 | 71.8 | 74.5 | 77.4 | 79.3 | 79.5 | 81.0 | 81.2 | 82.9 | 80.4 | 71.5 | 61.1 | 164.0 |
| 2000 | 57.0 | 65.2 | 70.6 | 73.4 | 76.5 | 78.5 | 77.5 | 78.7 | 78.4 | 80.4 | 77.2 | 67.6 | 56.0 | 163.5 |
| 2500 | 50.2 | 61.3 | 66.3 | 70.6 | 74.9 | 76.5 | 74.2 | 75.2 | 75.2 | 75.4 | 72.2 | 62.3 | 49.1 | 162.5 |
| 3150 | 45.2 | 55.6 | 61.5 | 64.9 | 70.2 | 71.9 | 68.6 | 68.7 | 70.1 | 67.5 | 64.6 | 53.5 | 37.3 | 160.8 |
| 4000 | 37.5 | 46.7 | 55.5 | 60.4 | 62.0 | 63.1 | 62.7 | 61.9 | 62.5 | 61.3 | 54.9 | 39.6 | 17.1 | 160.4 |
| 5000 | 23.0 | 33.4 | 43.7 | 49.3 | 55.0 | 56.2 | 52.3 | 51.6 | 50.7 | 48.1 | 40.3 | 20.2 | | 159.7 |
| 6300 | | | | | | | | | | | | | | 158.2 |
| 8000 | | | | | | | | | | | | | | 157.5 |
| 10000 | | | | | | | | | | | | | | 156.4 |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| OASPL | 84.7 | 87.3 | 90.0 | 90.5 | 91.7 | 93.7 | 94.9 | 96.9 | 99.5 | 103.9 | 105.9 | 103.4 | 96.7 | 161.4 |
| PNL | 88.0 | 91.9 | 95.0 | 96.8 | 99.3 | 101.2 | 101.2 | 102.9 | 105.0 | 107.9 | 108.7 | 104.2 | 86.3 | |
| PNL | 88.8 | 92.5 | 95.5 | 96.8 | 100.5 | 102.3 | 101.7 | 103.4 | 105.0 | 107.9 | 109.7 | 104.2 | 96.3 | |

DIAMETER RATIO 7.129 FREQUENCY SHIFT -9

TEST DATE 03-10-78 TAPE NO. N301 ALPHA SB59 TAMB 36.00
LOCATION C41 ANECH CH AERG. RDG. ADH162 PAMB 29.4900 RELHUM 37.00

MODEL TEST POINT 0409 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. FREE-JET SPEED M/SEC (0. FPS)

07/19/79 17.710

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X04103
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

| | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| FREQ | | | | | | | | | | | | | | |
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 62.0 | 64.5 | 65.6 | 67.2 | 67.3 | 69.2 | 71.4 | 73.6 | 76.0 | 103.4 | 108.3 | 111.5 | 110.9 | 144.5 |
| 315 | 64.3 | 65.3 | 66.6 | 67.4 | 68.0 | 70.1 | 71.0 | 72.9 | 77.9 | 106.0 | 109.4 | 112.6 | 110.0 | 145.4 |
| 400 | 65.8 | 66.6 | 68.0 | 67.2 | 68.5 | 70.9 | 72.5 | 74.4 | 78.7 | 109.3 | 112.7 | 113.6 | 108.5 | 147.2 |
| 500 | 66.2 | 67.0 | 69.1 | 69.0 | 70.1 | 71.7 | 73.9 | 75.8 | 100.5 | 110.3 | 114.0 | 112.7 | 105.1 | 147.6 |
| 630 | 66.8 | 68.1 | 70.1 | 69.4 | 70.6 | 73.2 | 75.0 | 77.7 | 102.6 | 111.5 | 114.6 | 111.3 | 101.2 | 147.9 |
| 800 | 69.3 | 67.9 | 70.9 | 71.9 | 71.8 | 74.4 | 76.0 | 79.2 | 104.1 | 111.5 | 114.4 | 109.5 | 98.7 | 147.7 |
| 1000 | 90.2 | 89.2 | 92.0 | 91.8 | 92.6 | 95.2 | 97.6 | 100.3 | 105.2 | 111.3 | 113.2 | 106.9 | 97.5 | 147.0 |
| 1250 | 89.3 | 91.3 | 93.8 | 93.1 | 94.0 | 97.1 | 98.0 | 101.6 | 105.3 | 110.7 | 113.5 | 105.0 | 95.9 | 147.0 |
| 1600 | 91.4 | 89.9 | 92.0 | 93.3 | 94.1 | 97.0 | 98.8 | 102.0 | 106.2 | 110.3 | 112.3 | 103.8 | 95.5 | 146.4 |
| 2000 | 89.8 | 90.3 | 92.6 | 92.6 | 93.7 | 96.3 | 98.4 | 102.1 | 106.3 | 111.2 | 110.9 | 102.3 | 95.3 | 146.2 |
| 2500 | 89.9 | 91.2 | 92.7 | 93.5 | 94.6 | 96.7 | 99.3 | 103.3 | 106.0 | 111.1 | 110.5 | 102.2 | 95.5 | 146.2 |
| 3150 | 91.5 | 92.3 | 93.3 | 93.8 | 94.6 | 97.5 | 100.1 | 103.8 | 107.1 | 110.9 | 110.9 | 103.8 | 95.8 | 146.6 |
| 4000 | 93.4 | 93.0 | 94.7 | 93.7 | 94.5 | 97.6 | 100.0 | 104.0 | 106.5 | 111.1 | 110.5 | 103.9 | 95.7 | 146.6 |
| 5000 | 95.1 | 94.7 | 96.0 | 95.5 | 96.0 | 97.9 | 100.3 | 104.0 | 106.5 | 110.7 | 110.0 | 102.9 | 95.6 | 146.5 |
| 6300 | 95.3 | 95.9 | 97.5 | 96.2 | 96.2 | 99.0 | 100.2 | 103.7 | 106.3 | 110.4 | 108.4 | 101.4 | 95.1 | 146.3 |
| 8000 | 94.9 | 96.3 | 98.0 | 97.8 | 97.8 | 99.8 | 100.3 | 103.4 | 105.9 | 109.1 | 106.8 | 100.1 | 93.9 | 145.9 |
| 10000 | 93.2 | 94.5 | 97.6 | 97.7 | 99.2 | 99.9 | 99.5 | 102.6 | 105.2 | 108.1 | 105.1 | 98.6 | 93.0 | 145.6 |
| 12500 | 91.2 | 92.8 | 95.4 | 96.2 | 97.7 | 99.1 | 98.5 | 100.7 | 102.8 | 105.3 | 102.6 | 97.0 | 91.7 | 144.3 |
| 16000 | 89.9 | 92.3 | 94.7 | 95.4 | 97.0 | 99.0 | 97.5 | 99.4 | 100.8 | 103.8 | 100.5 | 95.9 | 91.3 | 144.4 |
| 20000 | 85.5 | 89.5 | 91.6 | 93.1 | 96.6 | 97.4 | 95.1 | 96.9 | 98.5 | 100.1 | 97.0 | 93.6 | 89.6 | 143.6 |
| 25000 | 83.7 | 86.2 | 89.0 | 89.2 | 90.5 | 94.7 | 92.2 | 92.6 | 96.4 | 96.0 | 93.6 | 90.2 | 88.7 | 142.8 |
| 31500 | 82.0 | 81.9 | 86.8 | 88.1 | 88.8 | 89.3 | 89.3 | 90.3 | 93.4 | 93.6 | 91.2 | 86.5 | 83.0 | 142.8 |
| 40000 | 77.1 | 76.2 | 81.1 | 82.7 | 86.6 | 87.3 | 83.9 | 85.7 | 88.3 | 87.7 | 85.9 | 80.6 | 78.2 | 142.2 |
| 50000 | 70.2 | 70.9 | 73.7 | 76.3 | 78.7 | 79.9 | 78.9 | 78.4 | 83.0 | 80.7 | 79.0 | 76.3 | 72.2 | 140.0 |
| 63000 | 63.9 | 65.1 | 67.7 | 69.5 | 70.3 | 70.9 | 73.2 | 71.9 | 77.6 | 73.6 | 71.8 | 65.6 | 66.1 | 138.7 |
| 80000 | 57.9 | 56.5 | 61.0 | 64.8 | 63.2 | 65.4 | 64.9 | 65.4 | 70.7 | 67.2 | 66.1 | 60.1 | 57.8 | 138.8 |
| 0ASPL | 104.2 | 104.9 | 107.0 | 107.0 | 108.3 | 110.0 | 111.1 | 114.3 | 117.5 | 122.7 | 124.0 | 120.8 | 115.9 | 159.7 |

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TEST DATE 03-10-78 TAPE NO. N301 ALPHA SB59 TAMB 34.00
LOCATION C41 ANECH CH AERO. RDG. ADH163 PAMB 29.2550 RELHUM 50.40

MODEL TEST POINT 0410 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 17.7 SQ CM (27.55 SQ IN) - MODEL 117.96 M/SEC (387.0 FPS) FREE-JET SPEED

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS

IDENTIFICATION - FJ-400-FMDDL X04100

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | TURBULANCE CORRECTION - YES |
| | | 48.00 |

[illegible]

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
56.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FN3DL X04105

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 50 | 69.1 | 70.5 | 71.5 | 71.6 | 71.5 | 72.6 | 73.1 | 73.6 | 75.7 | 87.1 | 89.3 | 87.3 | 79.9 | 163.1 |
| 63 | 69.7 | 71.2 | 72.5 | 71.1 | 73.2 | 73.5 | 74.3 | 74.7 | 80.7 | 88.0 | 89.8 | 86.4 | 77.7 | 163.3 |
| 80 | 70.9 | 72.1 | 74.0 | 73.2 | 79.2 | 75.2 | 75.3 | 76.3 | 82.6 | 88.5 | 90.2 | 85.9 | 77.7 | 163.7 |
| 100 | 71.7 | 73.3 | 75.0 | 73.6 | 75.0 | 76.2 | 76.3 | 77.8 | 84.1 | 88.8 | 89.7 | 84.5 | 79.0 | 163.6 |
| 125 | 74.1 | 73.0 | 75.8 | 76.1 | 75.8 | 77.1 | 78.0 | 79.0 | 84.1 | 88.0 | 89.8 | 82.1 | 76.8 | 163.2 |
| 160 | 74.5 | 74.1 | 76.7 | 75.9 | 77.2 | 79.0 | 78.3 | 80.3 | 85.0 | 87.7 | 88.5 | 80.9 | 76.2 | 163.0 |
| 200 | 73.6 | 76.1 | 78.5 | 77.2 | 77.3 | 79.0 | 79.3 | 80.7 | 85.2 | 88.5 | 87.0 | 79.2 | 75.6 | 162.9 |
| 250 | 75.3 | 74.5 | 76.5 | 77.2 | 76.9 | 78.3 | 78.9 | 80.8 | 85.0 | 88.6 | 86.8 | 79.2 | 75.7 | 163.2 |
| 315 | 73.3 | 74.5 | 76.5 | 76.4 | 77.6 | 78.8 | 79.9 | 82.0 | 86.3 | 88.7 | 87.4 | 81.0 | 76.0 | 164.2 |
| 400 | 73.0 | 75.1 | 76.8 | 77.2 | 77.9 | 79.7 | 80.8 | 82.8 | 86.0 | 89.1 | 87.1 | 80.9 | 75.2 | 164.7 |
| 500 | 74.0 | 75.9 | 77.4 | 77.4 | 77.9 | 80.1 | 80.9 | 83.2 | 85.9 | 88.4 | 86.2 | 79.2 | 74.2 | 164.7 |
| 630 | 75.3 | 76.2 | 77.4 | 77.2 | 79.5 | 80.6 | 81.4 | 83.2 | 85.4 | 87.7 | 84.0 | 77.0 | 72.4 | 164.5 |
| 800 | 76.1 | 77.4 | 78.9 | 79.5 | 81.5 | 81.0 | 82.6 | 84.9 | 86.1 | 88.0 | 85.1 | 70.1 | 70.1 | 164.2 |
| 1000 | 75.8 | 78.2 | 79.3 | 81.0 | 81.3 | 80.9 | 82.1 | 84.1 | 85.1 | 80.1 | 73.1 | 68.2 | 164.3 | |
| 1250 | 75.0 | 78.3 | 79.6 | 82.3 | 82.1 | 80.1 | 81.2 | 82.3 | 82.8 | 78.2 | 72.0 | 67.2 | 164.3 | |
| 1600 | 72.2 | 75.5 | 77.9 | 80.4 | 81.0 | 79.3 | 79.5 | 80.9 | 82.0 | 76.5 | 70.8 | 65.5 | 164.4 | |
| 2000 | 68.7 | 72.7 | 76.1 | 77.7 | 80.2 | 80.9 | 78.3 | 78.4 | 79.7 | 79.1 | 73.4 | 68.1 | 61.6 | 164.3 |
| 2500 | 67.9 | 72.8 | 75.2 | 76.9 | 79.1 | 78.7 | 75.6 | 75.9 | 75.1 | 71.9 | 66.1 | 59.3 | 53.3 | 164.0 |
| 3150 | 59.5 | 67.0 | 70.6 | 72.5 | 74.7 | 74.7 | 70.4 | 68.5 | 72.7 | 69.9 | 63.4 | 54.3 | 43.1 | 163.9 |
| 4000 | 50.6 | 58.2 | 63.4 | 64.5 | 66.5 | 66.4 | 65.3 | 64.2 | 65.3 | 60.7 | 53.3 | 40.5 | 24.6 | 163.1 |
| 5000 | 35.7 | 43.3 | 52.5 | 55.0 | 59.8 | 59.6 | 55.1 | 54.6 | 54.2 | 46.5 | 36.8 | 21.7 | 162.7 | |
| 6300 | 15.2 | 25.1 | 36.3 | 40.6 | 41.8 | 42.3 | 40.0 | 36.5 | 37.6 | 26.0 | 12.7 | 161.4 | 159.9 | 158.0 |
| 8000 | | | 6.3 | 14.0 | 14.7 | 15.5 | 16.2 | 10.7 | 10.3 | | | | | |

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|-------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| GASPL | 86.0 | 87.7 | 90.1 | 89.8 | 91.2 | 92.0 | 91.6 | 93.1 | 96.5 | 99.7 | 99.3 | 94.1 | 87.8 | 177.3 |
| PNL | 92.7 | 92.0 | 99.1 | 99.4 | 101.2 | 101.6 | 100.0 | 100.7 | 103.1 | 104.8 | 102.6 | 96.2 | 90.3 | |
| PNLT | 92.7 | 96.0 | 99.8 | 100.1 | 102.5 | 102.7 | 100.0 | 100.7 | 103.7 | 104.8 | 102.6 | 96.2 | 90.3 | |

DIAMETER RATIO 7.129 FREQUENCY SHIFT -9

TEST DATE 03-10-78 TAPE NO. N301 IALPHA SB59 TAMB 34.00
LOCATION C41 ANECH CH AERG. RDG. ADH163 PAMB 29.2550 RELHUM 60.40

MODEL TEST POINT 0410 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.96 M/SEC (387.0 FPS) FREE-JET SPEED

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6.1.6 Measured Acoustic Data for Model 5

without struts

conic nozzle



IDENTIFICATION - MODEL FJ-ZER-FMODL X05010
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160.

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| TEST DATE | 12-15-77 | TAPE NO. | N281 | I ALPHA | \$359 | TAPB | 41.00 |
|-----------|--------------|------------|--------|---------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERG. RDG. | ADH006 | PANB | 29.4482 | RELHUM | 70.90 |

| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
|-------|------------|-------------------|----------------------------|----------------|
| | | | | M/SEC (FPS) |
| 0500 | 0501 | 12.2 M (40.0 FT) | 131.5 SQ CM (20.38 SQ IN) | 0. |
| | | | | 0. |

FREE-JET SPEED
M/SEC ()

07/19/79 17.791

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
 59.0 DEG F, 70 PERCENT R.H. STD. DAY, SR 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X05010

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PVL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

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GASPL 115.8 115.7 116.3 117.4 118.6 117.5 116.7 121.2 124.0 130.7 131.3 128.0 126.1 167.3

MODEL/FILE SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 0 REACTION CORRECTION - YES
 INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.09 TURBULANCE CORRECTION - YES

TEST DATE 12-15-77 TAPE NO. N281 ALPHA 3859 TAMB 41.00
 LOCATION C41 ANECH CH AERO. RDG. ADH005 PAMB 29.4462 RELHUM 70.50

MODEL TEST POINT 0501 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.36 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

357

07/19/79 17.781

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SR 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X05015

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|------|------|-------|
| 50 | 67.1 | 70.6 | 73.0 | 74.7 | 77.0 | 77.5 | 79.7 | 81.7 | 85.7 | 93.5 | 96.1 | 93.3 | 82.1 | 169.8 |
| 63 | 68.9 | 72.2 | 73.5 | 76.5 | 78.6 | 79.8 | 80.8 | 82.5 | 88.3 | 95.8 | 98.1 | 94.6 | 89.4 | 171.5 |
| 80 | 71.4 | 73.5 | 75.1 | 77.4 | 80.9 | 80.6 | 82.1 | 84.6 | 90.6 | 98.1 | 98.7 | 94.9 | 89.7 | 172.6 |
| 100 | 73.6 | 73.7 | 76.8 | 79.6 | 82.3 | 81.6 | 83.8 | 87.3 | 92.6 | 99.5 | 99.6 | 94.5 | 88.8 | 173.5 |
| 125 | 76.8 | 79.7 | 81.3 | 82.1 | 84.3 | 83.3 | 85.1 | 88.6 | 94.1 | 100.5 | 99.6 | 94.7 | 89.1 | 174.1 |
| 160 | 77.0 | 82.1 | 83.5 | 84.3 | 87.3 | 85.8 | 87.1 | 90.0 | 94.4 | 100.5 | 100.7 | 94.6 | 88.3 | 174.8 |
| 200 | 84.5 | 82.0 | 86.0 | 84.7 | 85.3 | 86.0 | 87.3 | 90.7 | 94.6 | 100.1 | 102.2 | 95.3 | 88.2 | 175.8 |
| 250 | 87.5 | 88.6 | 87.8 | 86.3 | 86.9 | 85.5 | 87.4 | 90.6 | 94.4 | 100.4 | 98.4 | 89.9 | 84.1 | 174.2 |
| 315 | 86.8 | 87.6 | 89.9 | 91.2 | 90.7 | 86.8 | 88.2 | 90.9 | 93.5 | 100.5 | 96.1 | 88.5 | 81.7 | 174.1 |
| 400 | 83.0 | 86.0 | 88.3 | 91.9 | 94.4 | 89.8 | 88.9 | 91.4 | 93.4 | 98.6 | 94.9 | 86.3 | 79.5 | 173.7 |
| 500 | 80.9 | 84.4 | 85.3 | 87.9 | 91.5 | 90.9 | 90.5 | 90.9 | 92.9 | 96.1 | 92.3 | 84.5 | 76.5 | 172.2 |
| 630 | 79.5 | 82.2 | 84.4 | 86.8 | 89.0 | 89.0 | 91.1 | 91.3 | 92.1 | 96.2 | 92.0 | 82.5 | 74.4 | 172.3 |
| 800 | 77.7 | 80.6 | 83.3 | 85.7 | 88.9 | 88.2 | 89.8 | 91.5 | 91.5 | 94.5 | 89.3 | 80.5 | 71.4 | 171.5 |
| 1000 | 75.5 | 79.5 | 82.6 | 85.2 | 86.4 | 87.7 | 88.5 | 91.1 | 90.3 | 93.9 | 88.3 | 78.1 | 68.9 | 171.3 |
| 1250 | 73.5 | 77.2 | 81.5 | 83.6 | 85.6 | 86.6 | 88.1 | 90.1 | 88.4 | 91.8 | 85.9 | 76.0 | 65.9 | 170.4 |
| 1600 | 69.9 | 74.7 | 78.2 | 81.4 | 82.9 | 84.8 | 85.4 | 87.9 | 86.5 | 89.1 | 82.6 | 72.8 | 60.6 | 169.2 |
| 2000 | 67.1 | 72.3 | 76.4 | 79.9 | 79.9 | 82.7 | 83.9 | 86.1 | 84.7 | 87.6 | 79.5 | 69.3 | 55.4 | 169.1 |
| 2500 | 60.9 | 68.4 | 71.6 | 76.2 | 76.2 | 79.3 | 80.4 | 81.5 | 80.9 | 82.1 | 72.6 | 60.7 | 46.8 | 167.1 |
| 3150 | 53.9 | 61.5 | 66.4 | 71.3 | 72.8 | 75.4 | 75.5 | 75.1 | 76.2 | 76.5 | 65.9 | 52.5 | 35.5 | 166.1 |
| 4000 | 44.4 | 53.2 | 60.0 | 65.7 | 67.2 | 68.1 | 68.1 | 69.4 | 69.0 | 71.5 | 59.3 | 39.9 | 16.0 | 167.5 |
| 5000 | 29.7 | 40.3 | 48.2 | 56.0 | 55.5 | 58.6 | 59.1 | 59.3 | 58.2 | 59.1 | 46.2 | 20.7 | | 166.8 |
| 6300 | 4.3 | 19.3 | 29.6 | 39.4 | 40.0 | 42.5 | 44.3 | 42.5 | 42.4 | 38.5 | 22.3 | | | 165.5 |
| 8000 | | | 2.8 | 15.1 | 17.4 | 18.2 | 20.2 | 17.0 | 16.7 | 7.5 | | | | 165.3 |
| 10000 | | | | | | | | | | | | | | 169.1 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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OASPL 93.1 94.7 96.4 98.2 100.1 98.8 99.8 101.9 104.3 110.0 109.3 103.6 97.9 185.5
 PNL 97.5 99.9 102.4 105.1 107.0 105.9 106.8 108.9 109.8 114.7 112.4 105.1 97.9
 PNL 98.7 100.5 102.4 105.1 107.6 105.9 107.3 108.9 110.3 113.3 113.6 105.6 97.9

DIAMETER RATIO 8.288 FREQUENCY SHIFT -9

TEST DATE 12-15-77 TAPE NO. N281 IALPHA SB59 TAMB 41.00
 LOCATION C41 ANECH CH AERO. RDG. ADH006 PAMB 29.4482 RELHUM 70.50

MODEL TEST POINT 0501 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)
 SIZE

FREE-JET SPEED

07/19/79 17.781

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X05020
BACKGROUND FJB300-FMODL X05230

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 82.5 | 86.6 | 88.3 | 87.4 | 88.2 | 90.1 | 92.7 | 94.6 | 97.8 | 104.6 | 109.3 | 111.5 | 116.1 | 146.7 |
| 315 | 83.6 | 85.6 | 85.9 | 86.2 | 90.3 | 90.9 | 92.8 | 94.7 | 99.4 | 106.5 | 110.9 | 112.6 | 116.7 | 147.7 |
| 400 | 85.6 | 87.2 | 88.4 | 89.2 | 91.8 | 91.9 | 94.3 | 96.5 | 101.5 | 110.8 | 115.2 | 114.6 | 116.0 | 149.8 |
| 500 | 87.7 | 88.8 | 88.3 | 91.1 | 93.7 | 94.3 | 95.4 | 98.3 | 104.0 | 113.6 | 117.0 | 114.2 | 113.6 | 150.7 |
| 630 | 90.8 | 88.9 | 90.9 | 92.4 | 95.5 | 94.6 | 97.3 | 100.4 | 106.4 | 115.9 | 118.3 | 114.5 | 111.9 | 152.0 |
| 800 | 91.1 | 89.4 | 92.4 | 93.9 | 96.5 | 96.1 | 99.0 | 103.4 | 109.1 | 117.7 | 119.3 | 113.0 | 109.9 | 153.0 |
| 1000 | 92.9 | 94.0 | 96.7 | 96.5 | 99.4 | 97.7 | 100.1 | 103.8 | 110.5 | 116.8 | 119.8 | 112.4 | 109.8 | 153.7 |
| 1250 | 97.0 | 98.8 | 99.3 | 99.6 | 102.9 | 102.8 | 102.7 | 106.1 | 112.2 | 119.1 | 123.8 | 114.7 | 110.6 | 156.2 |
| 1600 | 105.6 | 101.7 | 101.7 | 100.5 | 100.8 | 100.9 | 103.1 | 106.7 | 112.3 | 119.3 | 121.2 | 112.5 | 108.7 | 154.8 |
| 2000 | 106.9 | 108.5 | 106.7 | 104.5 | 102.9 | 100.8 | 103.1 | 107.0 | 112.4 | 119.8 | 120.5 | 110.5 | 109.5 | 155.0 |
| 2500 | 105.1 | 107.1 | 109.4 | 111.4 | 110.0 | 103.2 | 104.2 | 107.9 | 112.5 | 120.0 | 118.9 | 110.1 | 108.2 | 155.0 |
| 3150 | 102.8 | 103.9 | 105.4 | 107.9 | 111.5 | 107.7 | 106.0 | 108.9 | 112.6 | 118.5 | 117.5 | 109.7 | 106.9 | 154.0 |
| 4000 | 102.1 | 104.2 | 103.3 | 104.0 | 107.9 | 108.8 | 107.8 | 108.8 | 112.2 | 116.9 | 115.8 | 107.0 | 106.0 | 152.8 |
| 5000 | 100.8 | 101.9 | 103.0 | 104.5 | 105.6 | 106.2 | 109.0 | 109.7 | 112.4 | 116.9 | 115.8 | 106.4 | 104.4 | 152.8 |
| 6300 | 99.2 | 101.1 | 101.4 | 102.6 | 105.8 | 105.4 | 107.2 | 110.9 | 112.1 | 115.6 | 113.6 | 105.4 | 104.1 | 152.0 |
| 8000 | 97.5 | 100.4 | 100.7 | 102.8 | 103.5 | 104.8 | 106.1 | 110.7 | 111.1 | 114.8 | 112.8 | 103.4 | 102.2 | 151.6 |
| 10000 | 96.5 | 98.4 | 99.3 | 100.9 | 102.7 | 103.6 | 105.7 | 110.1 | 110.2 | 114.1 | 110.9 | 102.6 | 101.2 | 151.2 |
| 12500 | 93.2 | 96.0 | 96.9 | 99.2 | 99.5 | 102.2 | 104.0 | 107.9 | 108.2 | 111.6 | 108.3 | 100.5 | 98.2 | 149.8 |
| 16000 | 91.0 | 94.3 | 95.4 | 97.6 | 97.4 | 100.3 | 102.1 | 105.6 | 106.2 | 110.4 | 106.9 | 98.0 | 96.4 | 149.4 |
| 20000 | 86.8 | 91.0 | 91.3 | 94.7 | 94.1 | 96.4 | 99.1 | 101.8 | 102.6 | 106.0 | 101.2 | 93.9 | 92.9 | 147.1 |
| 25000 | 83.8 | 86.4 | 88.2 | 91.3 | 92.2 | 94.2 | 95.2 | 96.3 | 100.7 | 102.7 | 97.0 | 89.3 | 90.3 | 146.1 |
| 31500 | 80.1 | 82.7 | 84.4 | 88.3 | 89.7 | 89.7 | 91.8 | 94.3 | 96.7 | 101.5 | 95.7 | 85.0 | 85.8 | 146.9 |
| 40000 | 75.6 | 77.8 | 79.5 | 83.9 | 83.6 | 85.4 | 87.3 | 89.2 | 92.2 | 96.2 | 92.0 | 79.9 | 79.2 | 146.0 |
| 50000 | 69.6 | 72.4 | 73.9 | 78.7 | 78.7 | 79.9 | 82.9 | 82.1 | 87.9 | 89.0 | 85.6 | 73.8 | 72.8 | 144.4 |
| 63000 | 66.1 | 69.1 | 69.8 | 74.3 | 74.7 | 75.3 | 79.9 | 76.2 | 83.4 | 83.0 | 79.7 | 68.2 | 66.7 | 144.8 |
| 80000 | 64.8 | 66.9 | 69.1 | 73.0 | 71.2 | 72.4 | 75.2 | 71.1 | 77.3 | 79.7 | 76.6 | 60.6 | 57.9 | 147.6 |

QASPL 113.0 114.1 114.6 115.8 117.1 115.8 116.9 119.9 123.1 129.4 130.5 124.0 123.8 165.8

TEST DATE 12-15-77 TAPE NO. N281 IALPHA SB59 TAMB 37.40
LOCATION C41 ANECH CH AERO. RDG. ADH011 PAMB 29.4572 RELHUM 74.50

MODEL TEST POINT 0502 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 131.5 SQ CH (20.36 SQ IN) - MODEL 84.73 M/SEC (278.0 FPS) FREE-JET SPEED

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07/19/79 17.781

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X05020

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 67.8 | 90.8 | 89.6 | 89.6 | 89.3 | 90.1 | 91.4 | 92.1 | 96.9 | 103.3 | 107.3 | 109.2 | 114.6 | 145.0 |
| 315 | 87.8 | 90.8 | 89.6 | 90.5 | 91.5 | 91.0 | 91.8 | 92.7 | 99.1 | 107.8 | 111.8 | 111.8 | 114.9 | 147.3 |
| 400 | 89.8 | 90.0 | 89.3 | 91.6 | 93.1 | 92.1 | 93.4 | 94.5 | 102.7 | 111.8 | 115.1 | 113.1 | 114.8 | 149.4 |
| 500 | 90.8 | 91.5 | 91.8 | 93.4 | 94.9 | 94.4 | 94.8 | 97.0 | 105.1 | 114.4 | 117.0 | 114.6 | 115.2 | 151.2 |
| 630 | 92.9 | 93.1 | 91.7 | 94.8 | 96.8 | 94.8 | 96.6 | 99.0 | 107.8 | 116.1 | 118.0 | 113.7 | 114.9 | 152.1 |
| 800 | 96.0 | 93.2 | 94.3 | 96.3 | 97.9 | 96.4 | 98.3 | 101.8 | 109.4 | 117.6 | 119.1 | 114.0 | 116.5 | 153.3 |
| 1000 | 96.3 | 93.7 | 95.8 | 99.0 | 100.7 | 98.0 | 99.4 | 102.2 | 111.2 | 117.9 | 122.9 | 116.2 | 117.3 | 155.6 |
| 1250 | 98.1 | 98.3 | 100.2 | 102.1 | 104.4 | 101.2 | 102.1 | 104.5 | 111.3 | 118.0 | 120.3 | 113.9 | 115.4 | 154.2 |
| 1600 | 102.2 | 103.2 | 102.8 | 102.6 | 102.0 | 101.4 | 102.5 | 105.2 | 111.6 | 118.8 | 119.9 | 112.2 | 116.4 | 154.3 |
| 2000 | 110.4 | 105.2 | 104.7 | 106.7 | 104.2 | 101.5 | 102.7 | 105.7 | 111.8 | 119.0 | 118.3 | 111.7 | 114.9 | 154.1 |
| 2500 | 111.7 | 112.4 | 109.8 | 113.9 | 111.6 | 104.0 | 104.0 | 106.7 | 112.1 | 117.8 | 117.1 | 111.6 | 114.0 | 154.8 |
| 3150 | 109.4 | 111.0 | 112.6 | 110.8 | 113.4 | 108.7 | 106.0 | 107.9 | 112.1 | 116.6 | 115.9 | 109.4 | 113.6 | 154.4 |
| 4000 | 107.9 | 108.3 | 109.0 | 107.0 | 110.0 | 110.1 | 108.1 | 108.1 | 112.6 | 116.8 | 115.9 | 108.8 | 111.7 | 153.7 |
| 5000 | 107.2 | 108.7 | 106.9 | 107.7 | 108.0 | 107.8 | 109.6 | 109.3 | 112.9 | 116.1 | 114.5 | 108.6 | 112.5 | 153.3 |
| 6300 | 105.8 | 106.3 | 106.7 | 106.1 | 108.5 | 107.4 | 108.2 | 111.0 | 112.7 | 116.1 | 114.2 | 106.9 | 110.5 | 153.2 |
| 8000 | 104.0 | 105.5 | 105.1 | 106.6 | 106.6 | 107.3 | 107.6 | 111.3 | 112.1 | 115.5 | 112.5 | 106.3 | 109.7 | 152.9 |
| 10000 | 102.1 | 104.6 | 104.5 | 104.9 | 106.3 | 106.6 | 107.8 | 111.0 | 110.4 | 113.4 | 110.3 | 104.5 | 107.0 | 152.1 |
| 12500 | 100.8 | 102.5 | 103.0 | 104.0 | 103.4 | 105.2 | 106.1 | 108.9 | 108.8 | 112.7 | 109.4 | 102.5 | 105.7 | 151.5 |
| 16000 | 98.8 | 101.1 | 101.3 | 102.4 | 101.3 | 103.3 | 104.2 | 106.6 | 105.8 | 108.7 | 104.1 | 98.9 | 102.6 | 149.9 |
| 20000 | 95.3 | 99.0 | 99.3 | 99.5 | 98.0 | 99.4 | 101.2 | 102.9 | 104.4 | 106.0 | 100.5 | 94.9 | 100.7 | 148.9 |
| 25000 | 91.5 | 95.1 | 94.6 | 96.1 | 96.1 | 97.2 | 97.3 | 97.4 | 101.2 | 105.5 | 99.9 | 91.3 | 96.8 | 148.7 |
| 31500 | 87.7 | 89.7 | 90.7 | 93.1 | 93.7 | 92.7 | 93.9 | 95.2 | 97.6 | 101.1 | 97.1 | 87.0 | 91.1 | 148.1 |
| 40000 | 83.2 | 85.1 | 86.1 | 88.7 | 87.5 | 88.4 | 89.3 | 90.2 | 93.7 | 94.3 | 91.1 | 81.4 | 85.2 | 146.8 |
| 50000 | 78.3 | 79.8 | 80.8 | 83.6 | 82.6 | 82.9 | 85.1 | 83.2 | 80.3 | 89.4 | 86.3 | 76.9 | 80.1 | 146.5 |
| 63000 | 71.3 | 73.5 | 74.2 | 79.1 | 78.6 | 78.3 | 82.1 | 77.4 | 85.6 | 87.6 | 84.7 | 70.6 | 72.7 | 148.2 |
| 80000 | 66.4 | 68.7 | 68.6 | 77.8 | 75.1 | 75.4 | 77.3 | 72.2 | 75.7 | 77.7 | 74.8 | 60.8 | 62.9 | 148.4 |
| QASPL | 117.8 | 118.2 | 118.0 | 118.8 | 119.2 | 117.4 | 117.6 | 119.8 | 123.2 | 128.8 | 129.7 | 124.3 | 126.8 | 166.1 |

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 278.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 12-15-77 TAPE NO. N281 ALPHA SB59 TANB 37.40
LOCATION C41 ANECH CH AERO. RDG. ADH011 PAMB 29.4572 RELHUM 74.50

MODEL TEST POINT 0500 0602 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.38 SQ IN) - MODEL 84.73 M/SEC (278.0 FPS) SIZE FREE-JET SPEED

07/19/79 17.761

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X05025

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|-------|------|-------|-------|
| 50 | 67.7 | 70.4 | 70.8 | 73.8 | 75.7 | 74.9 | 76.0 | 76.7 | 84.2 | 92.3 | 94.0 | 89.8 | 88.2 | 167.8 |
| 63 | 69.7 | 72.0 | 73.3 | 75.6 | 77.6 | 77.2 | 77.5 | 79.2 | 86.6 | 94.6 | 95.8 | 91.2 | 88.5 | 169.5 |
| 80 | 71.7 | 73.5 | 73.1 | 77.0 | 79.4 | 77.6 | 79.2 | 81.1 | 89.3 | 96.5 | 96.9 | 90.3 | 88.1 | 170.4 |
| 100 | 74.6 | 73.5 | 75.7 | 76.5 | 80.4 | 79.1 | 80.8 | 83.9 | 90.9 | 97.9 | 97.9 | 90.5 | 89.6 | 171.7 |
| 125 | 74.9 | 74.0 | 77.2 | 81.0 | 83.2 | 80.7 | 81.9 | 84.3 | 92.5 | 98.1 | 101.5 | 92.5 | 90.1 | 173.9 |
| 160 | 76.6 | 78.4 | 81.4 | 84.0 | 86.8 | 83.7 | 84.4 | 86.5 | 92.5 | 98.1 | 98.8 | 90.0 | 87.8 | 172.5 |
| 200 | 80.4 | 83.1 | 83.8 | 84.3 | 84.2 | 83.8 | 84.7 | 87.0 | 92.6 | 98.6 | 98.1 | 88.0 | 88.4 | 172.7 |
| 250 | 88.3 | 84.8 | 85.5 | 88.2 | 86.2 | 83.6 | 84.7 | 87.3 | 92.6 | 98.6 | 96.1 | 87.1 | 86.3 | 172.5 |
| 315 | 89.2 | 91.7 | 90.3 | 95.2 | 93.4 | 85.9 | 85.7 | 88.0 | 92.6 | 97.0 | 94.6 | 86.4 | 84.6 | 173.2 |
| 400 | 86.3 | 89.8 | 92.7 | 91.7 | 94.9 | 90.3 | 87.4 | 88.9 | 92.2 | 95.4 | 92.8 | 83.5 | 83.2 | 172.7 |
| 500 | 84.4 | 86.8 | 88.8 | 87.7 | 91.1 | 91.4 | 89.3 | 88.8 | 92.4 | 95.2 | 92.4 | 82.3 | 80.2 | 172.0 |
| 630 | 83.2 | 86.7 | 86.4 | 88.0 | 88.9 | 90.5 | 89.7 | 92.4 | 94.2 | 90.5 | 81.4 | 80.0 | 171.7 | |
| 800 | 81.3 | 84.0 | 85.8 | 86.2 | 89.2 | 88.2 | 88.9 | 91.1 | 91.8 | 93.8 | 89.7 | 79.1 | 76.9 | 171.8 |
| 1000 | 79.1 | 82.9 | 84.1 | 86.5 | 87.1 | 88.0 | 88.1 | 91.3 | 91.0 | 92.9 | 87.6 | 77.9 | 74.9 | 171.3 |
| 1250 | 76.7 | 81.7 | 83.2 | 84.7 | 86.6 | 87.1 | 88.1 | 90.8 | 89.1 | 90.5 | 84.9 | 75.2 | 70.8 | 170.5 |
| 1600 | 74.5 | 78.9 | 81.3 | 83.4 | 83.5 | 85.5 | 86.2 | 88.4 | 87.1 | 89.1 | 83.1 | 71.8 | 67.1 | 169.9 |
| 2000 | 71.6 | 76.9 | 79.2 | 81.6 | 81.2 | 83.4 | 84.1 | 85.7 | 83.7 | 84.6 | 76.8 | 66.6 | 61.0 | 168.3 |
| 2500 | 67.2 | 73.6 | 76.4 | 78.1 | 77.4 | 79.1 | 80.6 | 81.4 | 81.5 | 80.7 | 71.4 | 59.8 | 54.2 | 167.3 |
| 3150 | 59.1 | 67.3 | 69.8 | 73.1 | 74.1 | 75.6 | 75.3 | 74.4 | 76.3 | 77.7 | 67.5 | 51.2 | 41.9 | 167.1 |
| 4000 | 49.0 | 57.2 | 62.0 | 66.8 | 68.7 | 68.2 | 68.9 | 68.9 | 68.9 | 68.6 | 58.4 | 38.0 | 21.8 | 166.5 |
| 5000 | 34.7 | 45.0 | 51.2 | 57.0 | 57.6 | 59.0 | 59.3 | 58.5 | 58.8 | 54.3 | 42.7 | 18.7 | | 165.2 |
| 6300 | 12.0 | 25.5 | 33.8 | 41.1 | 42.5 | 43.6 | 45.0 | 40.7 | 43.3 | 35.1 | 20.1 | | | 164.8 |
| 8000 | | | | | | | | | | | | | | 166.6 |
| 10000 | | | | | | | | | | | | | | 166.7 |

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5: SPL 94.7 96.8 97.9 99.6 100.5 98.5 98.5 100.2 103.3 108.1 107.7 99.8 98.1 184.4
 PNL 100.0 102.9 104.8 106.6 107.5 105.8 106.2 107.9 109.2 112.7 110.3 101.2 99.4
 PNL 100.0 103.7 105.4 107.4 108.4 105.8 106.2 107.9 109.8 112.7 110.9 101.2 99.4

DIAMETER RATIO 6.288 FREQUENCY SHIFT -9

TEST DATE 12-15-77 TAPE NO. N281 ALPHA SR59 TAPB 37.40
 LOCATION C41 ANECH CH AERO. RDG. ADH011 PAMB 29.4572 RELNUM 74.50

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
 0500 0502 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 84.73 M/SEC (276.0 FPS)

07/19/79 17.781

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. F. 70 PERCENT R.H. STD. DAY. SR 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X05030
BACKGROUND FJB400-FMODL X05220

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PUL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

OASPL

113.6

114.4

114.9

115.9

117.0

115.8

117.2

119.8

122.8

129.2

129.5

122.8

118.6

165.2

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LOCATION C41 ANECH CH AERO. RDG. ADH020 PAMB 29.4513 RELHUM 79.20MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
0500 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.38 SQ IN) - MODEL 112.78 M/SEC (370.0 FPS)

07/19/79 17.781

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F. 70 PERCENT R.H. STD. DAY. SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X05030

ANGLES MEASURED FROM INLET DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

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OASPL 120.0 119.9 119.6 119.6 120.0 118.0 118.2 119.5 123.0 128.4 128.7 123.6 124.1 165.7

MODEL/FILE SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 370.00 REACTION CORRECTION - YES

INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 12-15-77 TAPE NO. N281 IALPHA SB59 TAM3 35.08

LOCATION C41 ANECH CH AERO. RDG. ADH020 PAMB 29.4513 RELHUM 79.20

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
0500 0503 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.38 SQ IN) - MODEL 112.76 M/SEC (370.0 FPS)

363

07/19/79 17.781

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X05035

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 69.5 | 71.9 | 71.7 | 72.5 | 75.4 | 74.7 | 75.4 | 76.3 | 82.9 | 90.5 | 92.9 | 82.1 | 82.9 | 155.1 |
| 63 | 71.6 | 72.5 | 73.2 | 73.8 | 77.3 | 76.5 | 76.0 | 77.9 | 85.0 | 93.3 | 93.8 | 89.4 | 82.0 | 167.3 |
| 80 | 72.7 | 74.3 | 74.3 | 75.7 | 79.4 | 77.4 | 78.3 | 79.9 | 87.9 | 95.2 | 95.7 | 88.3 | 81.8 | 168.8 |
| 100 | 76.8 | 74.9 | 76.0 | 77.2 | 80.4 | 78.8 | 79.9 | 82.3 | 89.7 | 97.0 | 96.5 | 89.3 | 85.1 | 170.2 |
| 125 | 76.8 | 75.5 | 77.4 | 79.0 | 82.3 | 80.4 | 81.5 | 84.0 | 91.7 | 97.2 | 98.0 | 88.5 | 86.3 | 171.3 |
| 160 | 78.4 | 79.0 | 81.4 | 81.3 | 85.2 | 83.0 | 83.9 | 85.6 | 92.0 | 97.7 | 98.0 | 89.3 | 86.3 | 171.9 |
| 200 | 81.1 | 83.4 | 83.9 | 84.6 | 84.4 | 83.4 | 84.5 | 86.8 | 92.6 | 99.3 | 98.1 | 88.5 | 87.4 | 172.9 |
| 250 | 91.9 | 88.8 | 87.5 | 85.2 | 87.1 | 83.8 | 85.1 | 86.8 | 92.5 | 98.5 | 96.2 | 87.9 | 85.4 | 172.8 |
| 315 | 91.0 | 93.6 | 92.9 | 90.3 | 93.9 | 87.2 | 86.0 | 87.7 | 92.8 | 97.2 | 94.9 | 87.6 | 84.3 | 173.4 |
| 400 | 88.3 | 91.2 | 93.7 | 95.2 | 95.9 | 91.8 | 88.4 | 88.6 | 92.8 | 95.5 | 93.0 | 85.5 | 81.8 | 173.6 |
| 500 | 86.3 | 88.7 | 90.3 | 92.6 | 92.3 | 91.8 | 90.7 | 89.6 | 92.6 | 95.2 | 92.2 | 83.4 | 79.4 | 172.8 |
| 630 | 85.1 | 88.0 | 87.9 | 89.1 | 90.5 | 89.8 | 91.9 | 90.8 | 92.0 | 94.1 | 90.1 | 81.8 | 77.9 | 172.1 |
| 800 | 83.4 | 85.5 | 87.7 | 89.0 | 90.4 | 89.5 | 89.6 | 90.7 | 91.9 | 93.2 | 88.5 | 79.3 | 75.5 | 171.7 |
| 1000 | 81.7 | 84.4 | 85.9 | 87.5 | 88.1 | 88.2 | 88.4 | 90.3 | 90.2 | 92.3 | 86.6 | 78.0 | 73.7 | 171.1 |
| 1250 | 79.3 | 83.6 | 85.1 | 87.4 | 87.5 | 87.4 | 89.2 | 90.1 | 89.0 | 89.3 | 83.8 | 75.4 | 69.8 | 170.4 |
| 1600 | 76.6 | 80.7 | 83.2 | 84.3 | 84.0 | 85.5 | 86.3 | 87.4 | 87.0 | 88.7 | 81.3 | 72.5 | 66.7 | 169.7 |
| 2000 | 72.1 | 76.9 | 79.6 | 81.8 | 81.4 | 83.6 | 84.2 | 85.8 | 83.5 | 83.4 | 76.5 | 67.5 | 60.6 | 168.1 |
| 2500 | 67.7 | 74.1 | 76.3 | 79.1 | 77.8 | 79.2 | 80.7 | 80.6 | 81.4 | 80.3 | 71.4 | 62.0 | 55.7 | 167.3 |
| 3150 | 61.8 | 69.8 | 71.7 | 75.3 | 74.2 | 75.1 | 75.9 | 74.1 | 75.5 | 77.3 | 66.3 | 52.7 | 40.6 | 167.1 |
| 4000 | 51.4 | 59.6 | 63.4 | 67.0 | 68.2 | 67.9 | 68.0 | 67.5 | 67.5 | 67.1 | 57.4 | 38.7 | 21.8 | 165.8 |
| 5000 | 37.1 | 47.1 | 53.0 | 58.7 | 54.8 | 58.0 | 57.9 | 57.2 | 57.7 | 52.8 | 41.1 | 19.8 | | 164.5 |
| 6300 | 13.9 | 27.6 | 35.4 | 42.4 | 37.7 | 41.6 | 42.6 | 39.4 | 42.3 | 32.5 | 18.4 | | | 163.7 |
| 8000 | | | 6.2 | 14.2 | 14.1 | 17.2 | 19.2 | 13.8 | 16.2 | 6.8 | | | | 164.5 |
| 10000 | | | | | | | | | | | | | | 162.6 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| OASPL | 97.1 | 98.6 | 99.4 | 100.2 | 101.3 | 99.2 | 99.1 | 99.9 | 103.1 | 107.7 | 106.6 | 98.7 | 95.1 | 184.0 |
| PNL | 102.0 | 104.6 | 106.0 | 107.4 | 108.1 | 106.2 | 106.4 | 107.4 | 109.0 | 112.3 | 109.7 | 101.1 | 97.5 | |
| PNLT | 102.9 | 105.2 | 106.6 | 108.0 | 108.1 | 106.2 | 106.4 | 107.4 | 109.6 | 112.3 | 109.7 | 101.1 | 98.7 | |

DIAMETER RATIO 8.288 FREQUENCY SHIFT -9

TEST DATE 12-15-77 TAPE NO. N281 IALPHA SB59 TAMB 35.08
LOCATION C41 ANECH CH AERO. RDG. ADH020 PAMB 29.4513 RELHUM 79.20

MODEL TEST POINT 0503 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 112.78 M/SEC (370.0 FPS) FREE-JET SPEED

07/19/79 17.781

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X05040
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. FM

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

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TEST DATE 12-15-77 TAPE NO. N281 ALPHA SB59 TAMB 41.38
LOCATION C41 ANECH CH AERO. RDG. ADH005 PAMB 29.4930 RELHUM 68.20

MODEL TEST POINT 0504 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.38 SQ IN) - MODEL 0. M/SEC (0. FPS)

365

07/19/79 17.701

366

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X05040

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|-----|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | | | | | | | | | | | | | | |
| 315 | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | | |
| 630 | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | |
| 1000 | | | | | | | | | | | | | | |
| 1250 | | | | | | | | | | | | | | |
| 1600 | | | | | | | | | | | | | | |
| 2000 | | | | | | | | | | | | | | |
| 2500 | | | | | | | | | | | | | | |
| 3150 | | | | | | | | | | | | | | |
| 4000 | | | | | | | | | | | | | | |
| 5000 | | | | | | | | | | | | | | |
| 6300 | | | | | | | | | | | | | | |
| 8000 | | | | | | | | | | | | | | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| GASPL | 112.4 | 112.9 | 113.1 | 114.2 | 115.6 | 115.2 | 116.5 | 119.5 | 122.7 | 129.5 | 130.0 | 126.2 | 128.1 | 165.9 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|

| MODEL/INLET SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | REFRACTION CORRECTION - YES |
|-------------------------------|------------------------------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) 48.00 | TURBULANCE CORRECTION - YES |

| | | | | | | | |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| TEST DATE | 12-15-77 | TAPE NO. | N281 | ALPHA | SB59 | TAMB | 41.38 |
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH005 | PAMB | 29.4930 | RELHUM | 68.20 |

| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
|-------|------------|-----------------------|------------------------------------|--------------------|
| 0500 | 0504 | 12.2 M (40.0 FT) ARC | 131.5 SQ CM (20.38 SQ IN) - MODEL | 0. M/SEC (0. FPS) |

07/19/79 17.761

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SEA 2400.0 FT., SL

IDENTIFICATION - FJ-ZER-FMODL X05045

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 85.6 | 89.8 | 71.2 | 73.0 | 75.7 | 76.2 | 78.7 | 81.0 | 85.0 | 92.0 | 94.1 | 91.8 | 90.4 | 158.7 |
| 63 | 67.6 | 71.2 | 72.5 | 75.5 | 77.6 | 79.1 | 79.5 | 81.3 | 87.0 | 94.8 | 95.9 | 92.1 | 90.4 | 170.0 |
| 80 | 69.9 | 72.3 | 74.6 | 76.6 | 79.9 | 79.1 | 81.1 | 83.9 | 89.9 | 97.1 | 97.4 | 93.1 | 91.4 | 171.7 |
| 100 | 71.9 | 72.5 | 75.8 | 77.6 | 81.3 | 80.8 | 82.8 | 85.6 | 91.8 | 98.6 | 98.4 | 93.1 | 91.3 | 172.6 |
| 125 | 75.8 | 78.9 | 80.8 | 81.1 | 83.3 | 82.6 | 84.1 | 86.8 | 92.6 | 99.3 | 98.6 | 93.2 | 92.1 | 173.3 |
| 160 | 74.0 | 80.1 | 81.0 | 82.5 | 86.3 | 85.1 | 85.8 | 88.5 | 93.4 | 99.0 | 99.7 | 93.1 | 91.1 | 173.9 |
| 200 | 76.6 | 77.3 | 79.7 | 81.2 | 84.0 | 83.8 | 86.0 | 89.5 | 93.4 | 98.9 | 99.5 | 91.5 | 89.2 | 173.6 |
| 250 | 81.6 | 83.3 | 82.5 | 82.1 | 84.6 | 84.2 | 86.4 | 89.3 | 92.3 | 99.7 | 98.2 | 99.1 | 87.1 | 173.5 |
| 315 | 84.5 | 84.4 | 85.9 | 85.7 | 85.7 | 84.9 | 86.2 | 89.4 | 92.5 | 99.0 | 95.9 | 87.2 | 84.4 | 172.8 |
| 400 | 81.5 | 85.0 | 86.3 | 88.4 | 88.7 | 85.3 | 86.7 | 90.1 | 92.2 | 97.3 | 93.9 | 85.1 | 82.5 | 172.1 |
| 500 | 78.4 | 81.7 | 83.3 | 86.4 | 89.0 | 87.1 | 87.3 | 89.4 | 91.5 | 95.1 | 92.0 | 83.3 | 79.6 | 171.0 |
| 630 | 77.1 | 79.3 | 81.9 | 84.1 | 87.3 | 87.8 | 87.9 | 89.1 | 90.8 | 94.9 | 91.5 | 81.3 | 76.9 | 171.0 |
| 800 | 74.5 | 78.3 | 79.8 | 83.0 | 85.7 | 86.5 | 87.8 | 89.7 | 93.0 | 93.0 | 89.3 | 79.3 | 74.4 | 170.0 |
| 1000 | 72.0 | 77.0 | 79.2 | 82.5 | 83.5 | 85.2 | 86.1 | 88.9 | 88.6 | 92.5 | 87.4 | 76.9 | 71.4 | 169.6 |
| 1250 | 70.3 | 75.0 | 77.5 | 80.6 | 83.3 | 84.4 | 85.8 | 88.6 | 85.9 | 90.6 | 85.2 | 74.7 | 69.7 | 169.0 |
| 1600 | 66.2 | 71.5 | 74.3 | 78.1 | 79.6 | 82.6 | 83.6 | 86.4 | 85.0 | 87.9 | 82.1 | 71.3 | 63.5 | 167.7 |
| 2000 | 62.8 | 69.6 | 72.4 | 76.8 | 77.4 | 80.5 | 81.7 | 83.9 | 82.4 | 85.9 | 79.3 | 67.8 | 59.2 | 167.3 |
| 2500 | 56.7 | 64.6 | 67.8 | 72.7 | 72.9 | 75.0 | 78.2 | 78.8 | 78.9 | 80.6 | 72.4 | 60.0 | 49.8 | 165.1 |
| 3150 | 49.9 | 57.7 | 62.7 | 67.3 | 68.7 | 72.4 | 73.0 | 72.9 | 74.4 | 75.0 | 65.9 | 51.7 | 38.7 | 154.3 |
| 4000 | 40.1 | 48.6 | 55.2 | 61.6 | 63.4 | 65.6 | 66.0 | 67.4 | 67.0 | 69.7 | 59.0 | 38.4 | 18.2 | 165.6 |
| 5000 | 25.4 | 36.2 | 43.4 | 51.2 | 50.4 | 55.0 | 56.3 | 57.0 | 56.4 | 58.2 | 46.1 | 19.6 | | 165.4 |
| 6300 | 0.4 | 15.0 | 25.0 | 32.8 | 32.9 | 38.4 | 40.9 | 39.4 | 39.6 | 37.4 | 21.7 | | | 163.5 |
| 8000 | | | | | | | | | | | | | | 163.5 |
| 10000 | | | | | | | | | | | | | | 165.4 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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OASPL 89.6 91.8 93.2 95.0 96.9 96.5 97.7 100.3 103.0 103.8 107.9 101.8 99.9 184.2
PWL 94.5 97.5 99.3 101.8 103.3 103.5 104.7 107.1 108.4 113.4 110.9 102.8 99.9
PWL 95.7 97.5 99.3 101.8 103.3 103.5 104.7 107.1 108.4 114.4 112.2 102.8 100.9

DIAMETER RATIO 8.288 FREQUENCY SHIFT -9

TEST DATE 12-15-77 TAPE NO. N281 ALPHA SB59 TAMB 41.38
LOCATION C41 ANECH CH AERO. RDG. ADH005 PAMB 29.4930 RELHUM 68.20

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
0500 0504 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)

07/19/79 17.781

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
53.0 DEG. E. 70 PERCENT R.H. STD. DAY, SR 40.0 FT. ARCIDENTIFICATION - MODEL FJ-300-FMODL X05050
BACKGROUND FJB300-FMODL X05230

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PUL

FREQ

50

53

60

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

OASPL

109.3

110.0

111.3

112.5

113.7

114.1

117.0

120.2

127.3

128.8

122.5

122.0

163.6

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LOCATION C41 ANECH CHTAPE NO. N281
AERO. RDG. ADH010ALPHA S859
PAMB 29.4562TAMB 38.84
RELHUM 73.50MODEL TEST POINT
0500 3505ACOUSTIC RANGE
12.2 M (40.0 FT) ARCSIZE
131.5 SQ CM (20.38 SQ IN)MODEL
84.73 M/SEC (278.0 FPS)

FREE-JET SPEED

07/19/79 17.791

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SR 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X05050

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

160

200

250 86.2 89.5 88.3 88.0 87.0 88.3 89.6 91.1 95.1 101.0 105.3 107.7 112.6 143.1

315 86.2 89.5 88.3 88.0 87.0 88.3 89.6 91.1 95.1 101.0 105.3 107.7 112.6 143.1

400 87.3 88.5 88.3 89.3 91.1 90.6 91.4 93.5 100.0 109.2 112.9 111.9 113.3 147.5

500 89.3 89.8 90.1 92.2 92.9 92.7 92.8 94.7 103.3 112.6 114.9 113.4 113.8 149.4

630 91.1 91.4 90.7 93.8 95.3 94.9 97.1 105.3 114.0 116.4 112.3 112.3 150.2

800 95.2 91.7 92.8 95.1 96.8 94.6 96.3 99.3 105.8 115.7 117.4 112.0 113.6 151.4

1000 95.0 92.2 94.1 97.7 99.0 97.0 97.6 100.6 108.1 115.6 119.1 112.6 114.0 152.3

1250 96.4 96.1 98.4 99.6 102.1 99.7 99.6 102.0 108.3 116.5 119.3 112.9 113.9 152.8

1600 96.7 97.9 99.3 99.5 100.7 99.9 100.3 102.7 109.3 117.2 119.3 111.8 114.3 153.0

2000 101.8 97.9 99.5 101.6 101.1 99.9 100.9 103.4 108.7 116.9 117.7 111.6 114.3 152.3

2500 107.2 106.0 103.9 106.4 104.1 101.2 102.0 104.3 109.2 115.5 116.3 110.2 113.4 151.9

3150 107.3 107.2 108.0 109.5 108.9 103.7 102.5 105.3 109.2 113.9 114.8 108.6 112.1 151.7

4000 105.9 107.3 108.5 107.0 108.7 106.3 106.4 105.4 109.4 114.2 114.7 107.8 111.5 151.8

5000 103.2 104.4 104.7 104.6 106.7 106.3 106.3 106.4 109.9 113.7 112.6 106.8 110.8 150.9

6300 102.5 102.8 103.4 104.6 106.1 105.3 106.2 107.0 109.6 113.8 112.2 105.1 108.5 150.7

8000 102.4 103.0 103.0 104.3 104.2 104.8 105.3 107.8 109.1 112.9 110.9 104.8 108.7 150.4

10000 99.9 102.1 102.1 102.7 103.4 104.3 105.3 108.3 107.3 110.6 108.7 101.7 105.7 149.6

12500 97.9 99.5 100.2 100.0 100.4 102.5 102.5 105.3 105.1 109.2 107.2 100.9 104.7 148.5

16000 94.4 96.3 97.3 99.0 97.8 100.5 100.7 103.3 102.7 106.2 103.1 97.2 100.4 147.0

20000 91.3 94.1 95.1 95.1 94.1 96.5 97.7 98.8 100.5 103.1 99.6 94.0 99.4 145.6

25000 86.6 89.7 90.0 91.3 91.8 94.1 94.1 94.4 97.3 102.2 98.4 90.7 94.7 145.4

31500 82.3 84.4 86.4 89.1 88.3 89.7 89.2 91.1 93.0 98.4 95.3 85.0 89.1 144.7

40000 78.1 79.6 82.1 83.8 91.1 84.2 85.3 89.1 92.1 88.3 79.1 82.9 143.0

50000 73.5 74.1 76.3 78.1 74.9 77.2 78.2 78.3 85.9 87.3 85.0 74.2 77.2 142.6

63000 67.6 68.3 70.3 73.0 70.8 70.7 73.2 71.4 81.0 83.3 81.6 67.6 69.9 143.4

80000 59.8 61.1 64.4 71.4 68.1 65.7 67.4 65.8 71.2 73.5 71.8 57.8 60.1 142.3

OASPL 114.1 114.3 114.8 115.5 116.0 114.7 114.9 116.7 120.3 126.6 128.1 122.8 125.0 163.7

MODEL/FULL SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 278.00 REFRACTION CORRECTION - YES
INPUT 1.000 CALS. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 12-15-77 TAPE NO. N281 IALPHA SB52 IAMB 38.84
LOCATION C41 ANECH CH AERO. RDG. ADH010 PAMB 29.4562 RELHUM 73.60

MODEL TEST POINT ACQUATIC RANGE SIZE FREE-JET SPEED
0500 0505 12.2 M 40.0 FT) ARC 131.5 SQ CM (20.38 SQ IN) - MODEL 84.73 M/SEC (278.0 FPS)

369

07/19/79 17.781

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X05055

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 68.2 | 68.9 | 69.8 | 72.6 | 73.7 | 73.4 | 74.0 | 75.7 | 81.5 | 89.7 | 91.8 | 88.6 | 86.7 | 165.8 |
| 63 | 68.2 | 70.2 | 71.6 | 74.4 | 75.6 | 75.5 | 75.4 | 76.9 | 84.8 | 93.0 | 93.8 | 90.1 | 87.1 | 167.8 |
| 80 | 69.9 | 71.7 | 72.1 | 76.0 | 77.9 | 76.1 | 77.5 | 79.3 | 86.7 | 94.4 | 95.3 | 88.9 | 85.6 | 168.6 |
| 100 | 74.0 | 72.0 | 74.2 | 77.2 | 79.2 | 77.3 | 78.8 | 81.4 | 88.2 | 96.0 | 96.2 | 88.5 | 86.7 | 169.7 |
| 125 | 73.7 | 72.5 | 75.4 | 79.8 | 81.5 | 79.7 | 80.1 | 82.7 | 89.5 | 95.8 | 97.7 | 89.0 | 86.8 | 170.7 |
| 160 | 74.8 | 76.2 | 79.6 | 81.5 | 84.5 | 82.2 | 81.9 | 84.0 | 89.5 | 96.6 | 97.8 | 89.0 | 86.3 | 171.2 |
| 200 | 74.9 | 77.8 | 80.3 | 81.3 | 82.9 | 82.3 | 82.5 | 84.5 | 90.3 | 97.1 | 97.5 | 87.6 | 86.3 | 171.4 |
| 250 | 79.7 | 77.5 | 80.3 | 83.2 | 83.2 | 82.1 | 83.0 | 85.0 | 89.4 | 96.5 | 95.6 | 86.9 | 85.7 | 170.7 |
| 315 | 84.7 | 85.3 | 84.4 | 87.7 | 85.9 | 83.1 | 83.8 | 85.5 | 89.7 | 94.7 | 93.8 | 85.0 | 84.0 | 170.2 |
| 400 | 84.2 | 86.0 | 88.1 | 90.5 | 90.4 | 85.3 | 83.9 | 86.2 | 89.3 | 92.8 | 91.8 | 82.8 | 81.7 | 170.1 |
| 500 | 82.4 | 85.8 | 88.3 | 87.7 | 89.9 | 87.9 | 85.8 | 86.1 | 89.2 | 92.7 | 91.2 | 81.3 | 80.1 | 170.2 |
| 630 | 78.2 | 82.5 | 84.2 | 85.0 | 87.6 | 87.3 | 87.2 | 86.7 | 89.4 | 91.8 | 88.6 | 79.6 | 78.3 | 169.3 |
| 800 | 78.0 | 80.5 | 82.6 | 84.7 | 85.8 | 86.2 | 86.8 | 87.1 | 88.8 | 91.5 | 87.7 | 77.3 | 74.8 | 169.1 |
| 1000 | 77.4 | 80.4 | 82.0 | 84.3 | 84.7 | 85.5 | 85.8 | 87.7 | 88.1 | 90.3 | 85.9 | 76.2 | 73.9 | 168.8 |
| 1250 | 74.5 | 79.2 | 80.8 | 82.4 | 83.7 | 84.9 | 85.7 | 88.1 | 86.0 | 87.6 | 83.3 | 72.4 | 69.5 | 167.9 |
| 1600 | 71.6 | 75.9 | 78.4 | 79.4 | 80.5 | 82.8 | 82.6 | 84.8 | 84.4 | 85.4 | 80.9 | 70.2 | 66.1 | 166.9 |
| 2000 | 67.1 | 72.2 | 75.2 | 78.1 | 77.8 | 80.7 | 80.6 | 82.5 | 80.7 | 82.1 | 75.9 | 64.8 | 58.8 | 165.4 |
| 2500 | 62.2 | 68.7 | 72.2 | 73.7 | 73.5 | 76.2 | 77.1 | 77.4 | 77.6 | 77.8 | 70.6 | 58.8 | 52.9 | 164.0 |
| 3150 | 54.1 | 61.9 | 65.1 | 68.2 | 69.8 | 72.5 | 72.1 | 71.4 | 72.5 | 74.4 | 65.9 | 50.6 | 39.8 | 163.8 |
| 4000 | 43.7 | 51.8 | 57.7 | 62.8 | 63.9 | 65.1 | 64.2 | 64.8 | 64.3 | 65.8 | 56.6 | 35.9 | 19.7 | 163.1 |
| 5000 | 29.7 | 39.5 | 47.2 | 52.0 | 51.1 | 54.8 | 54.2 | 53.6 | 54.2 | 52.0 | 39.9 | 16.4 | | 161.3 |
| 6300 | 7.3 | 19.8 | 29.4 | 35.6 | 34.8 | 37.9 | 38.1 | 35.3 | 38.9 | 33.0 | 18.7 | | | 161.0 |
| 8000 | | | 2.0 | 11.2 | 12.6 | 13.6 | 15.0 | 9.7 | 12.7 | 4.2 | | | | 161.8 |
| 10000 | | | | | | | | | | | | | | 160.6 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| GASPL | 90.8 | 92.8 | 94.6 | 96.3 | 97.2 | 95.9 | 95.8 | 97.2 | 100.4 | 106.0 | 106.0 | 98.3 | 96.2 | 162.0 |
| PNL | 96.3 | 98.8 | 101.1 | 103.2 | 103.8 | 103.1 | 103.1 | 104.7 | 106.2 | 110.4 | 109.0 | 99.7 | 97.7 | |
| PNLT | 96.3 | 99.4 | 101.6 | 103.2 | 103.8 | 103.1 | 103.1 | 104.7 | 106.8 | 110.9 | 109.0 | 99.7 | 97.7 | |

DIAMETER RATIO 8.288 FREQUENCY SHIFT -9

TEST DATE 12-15-77 TAPE NO. N291 IALPHA SB59 TAMB 38.84
LOCATION C41 ANECH CH AERO. RDG. ADH010 PAMB 29.4562 RELHUM 73.50

MODEL TEST POINT 0505 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 84.73 M/SEC (278.0 FPS)
SIZE

07/19/79 17.781

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG F, 70 PERCENT RH STD. DAY, 98 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FM0DL X05060
BACKGROUND FJB400-FM0DL X05220

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | FM |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 80.9 | 83.7 | 83.4 | 85.0 | 85.6 | 87.2 | 88.6 | 92.1 | 95.3 | 102.1 | 107.3 | 109.5 | 109.6 | 143.1 |
| 315 | 81.6 | 83.6 | 83.6 | 85.9 | 87.7 | 88.6 | 90.2 | 92.2 | 97.2 | 103.7 | 108.6 | 110.3 | 109.5 | 143.9 |
| 400 | 84.1 | 84.4 | 85.6 | 87.2 | 89.3 | 89.4 | 91.6 | 94.7 | 98.7 | 108.3 | 112.4 | 111.6 | 107.7 | 146.3 |
| 500 | 85.6 | 86.5 | 86.5 | 89.9 | 91.7 | 93.1 | 95.6 | 101.3 | 110.6 | 114.5 | 111.7 | 104.6 | 147.7 | |
| 630 | 91.8 | 87.6 | 88.8 | 90.1 | 93.0 | 92.8 | 95.2 | 97.7 | 103.3 | 113.4 | 115.8 | 111.0 | 101.9 | 149.1 |
| 800 | 89.1 | 87.6 | 89.9 | 92.2 | 94.3 | 94.1 | 96.8 | 100.2 | 106.1 | 115.5 | 117.1 | 109.0 | 100.4 | 150.4 |
| 1000 | 90.4 | 91.7 | 93.7 | 94.0 | 96.6 | 95.5 | 97.8 | 101.6 | 107.7 | 116.3 | 117.2 | 108.1 | 101.5 | 150.9 |
| 1250 | 92.0 | 94.0 | 95.3 | 95.8 | 99.7 | 98.3 | 99.2 | 103.6 | 109.0 | 116.4 | 118.5 | 107.9 | 101.5 | 151.6 |
| 1600 | 99.1 | 96.7 | 97.9 | 96.5 | 97.8 | 98.2 | 100.3 | 104.2 | 109.6 | 116.8 | 118.7 | 108.7 | 102.7 | 152.2 |
| 2000 | 103.2 | 103.5 | 101.0 | 95.0 | 99.1 | 98.3 | 100.6 | 105.0 | 110.1 | 117.1 | 118.5 | 108.3 | 103.6 | 152.4 |
| 2500 | 104.1 | 103.9 | 105.6 | 105.4 | 103.2 | 100.5 | 101.2 | 105.2 | 109.5 | 117.2 | 116.9 | 108.6 | 103.4 | 152.2 |
| 3150 | 100.8 | 102.4 | 104.4 | 106.9 | 107.3 | 103.0 | 102.8 | 106.7 | 110.1 | 114.6 | 115.5 | 106.9 | 101.9 | 151.2 |
| 4000 | 98.4 | 99.0 | 100.0 | 102.8 | 106.4 | 105.1 | 104.1 | 105.8 | 104.2 | 113.4 | 113.3 | 105.2 | 100.5 | 149.8 |
| 5000 | 97.3 | 97.7 | 98.7 | 100.7 | 103.9 | 104.5 | 105.5 | 107.2 | 108.9 | 114.1 | 113.3 | 104.4 | 99.4 | 150.0 |
| 6300 | 95.5 | 96.7 | 97.9 | 99.6 | 102.5 | 102.7 | 104.9 | 107.1 | 108.8 | 112.1 | 111.1 | 102.9 | 98.3 | 148.8 |
| 8000 | 93.7 | 95.6 | 96.5 | 99.1 | 100.2 | 101.6 | 103.3 | 107.2 | 108.6 | 112.1 | 109.8 | 101.7 | 96.4 | 148.7 |
| 10000 | 91.9 | 93.4 | 94.8 | 97.3 | 99.2 | 100.5 | 103.0 | 106.5 | 107.4 | 110.5 | 108.1 | 100.1 | 95.2 | 147.9 |
| 12500 | 88.6 | 90.5 | 92.1 | 94.6 | 96.0 | 99.5 | 101.2 | 104.6 | 105.6 | 107.8 | 105.6 | 97.7 | 93.9 | 146.6 |
| 16000 | 85.7 | 89.0 | 90.1 | 93.2 | 93.3 | 96.7 | 98.6 | 102.3 | 103.6 | 105.6 | 103.1 | 95.9 | 92.1 | 145.6 |
| 20000 | 81.2 | 85.1 | 85.9 | 89.8 | 89.8 | 92.8 | 95.5 | 97.7 | 100.2 | 102.3 | 98.3 | 92.6 | 88.5 | 143.6 |
| 25000 | 78.1 | 81.0 | 82.5 | 85.8 | 87.3 | 89.8 | 91.8 | 92.6 | 97.0 | 98.5 | 93.5 | 87.9 | 85.9 | 142.2 |
| 31500 | 74.2 | 76.4 | 79.2 | 83.5 | 84.3 | 85.8 | 87.9 | 88.8 | 92.7 | 96.7 | 91.0 | 83.6 | 81.1 | 142.4 |
| 40000 | 69.6 | 71.7 | 73.2 | 78.1 | 75.9 | 80.7 | 82.0 | 84.4 | 87.5 | 92.1 | 85.5 | 77.7 | 74.5 | 141.2 |
| 50000 | 62.1 | 65.0 | 67.5 | 70.9 | 68.9 | 73.1 | 75.7 | 76.8 | 82.3 | 83.8 | 78.2 | 71.8 | 68.6 | 138.5 |
| 63000 | 57.6 | 60.3 | 62.7 | 64.2 | 63.3 | 66.3 | 68.8 | 69.9 | 78.1 | 76.6 | 72.1 | 64.9 | 61.1 | 137.9 |
| 80000 | 54.0 | 57.0 | 59.6 | 61.9 | 59.4 | 60.8 | 62.1 | 64.0 | 70.7 | 72.8 | 66.0 | 56.0 | 52.1 | 139.1 |
| OASPL | 109.7 | 110.1 | 111.0 | 112.2 | 113.5 | 112.6 | 113.6 | 117.0 | 120.3 | 126.5 | 127.6 | 120.8 | 116.5 | 162.6 |

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TEST DATE 12-15-77 TAPE NO. N261 ALPHA 5859 TAPB 35.06
LOCATION C41 ANECH CH AERO. RDG. ADH019 PAPB 29.4523 RELHUM 79.20

MODEL TEST POINT 0506 ACOUSTIC RANGE 15.0 FT (40.0 FT) ARC 131.5 SQ CH (20.38 SQ IN) - MODEL 112.78 M/SEC (370.0 FPS) FREE-JET SPEED

07/19/79 17.781

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F. 70 PERCENT R.H. STD. DAY, SA 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X05060

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

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OASPL 116.7 116.2 116.0 116.3 116.8 114.9 114.9 116.6 120.4 125.8 126.9 121.7 122.5 163.1

MODEL/FULL SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 370.00 REFRACTION CORRECTION - YES
INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 12-15-77 TAPE NO. N281 ALPHA 8859 TAMB 35.08
LOCATION C41 ANECH CH AERO. RDG. ADH019 PAMB 29.4523 RELHUM 79.20

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
0500 0506 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.38 SQ IN) - MODEL 112.76 M/SEC (370.0 FPS)

07/19/79 17.781

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F. 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X05065

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 67.7 | 69.9 | 69.9 | 71.2 | 73.6 | 72.4 | 73.7 | 75.3 | 80.6 | 88.6 | 90.8 | 87.3 | 80.4 | 164.1 |
| 63 | 70.0 | 70.7 | 71.7 | 72.6 | 75.2 | 74.8 | 74.8 | 75.9 | 83.2 | 91.1 | 92.1 | 87.0 | 79.1 | 165.3 |
| 80 | 71.7 | 72.8 | 72.5 | 74.2 | 77.0 | 75.9 | 76.8 | 77.6 | 85.6 | 93.4 | 93.6 | 85.7 | 79.2 | 166.8 |
| 100 | 73.4 | 72.1 | 73.7 | 74.7 | 78.7 | 77.3 | 78.3 | 80.0 | 87.7 | 94.8 | 94.6 | 86.3 | 83.2 | 168.2 |
| 125 | 74.8 | 73.8 | 75.9 | 77.5 | 81.0 | 78.5 | 79.5 | 81.7 | 89.0 | 94.9 | 95.9 | 86.1 | 83.3 | 169.0 |
| 160 | 75.9 | 77.7 | 79.6 | 79.3 | 84.1 | 81.5 | 80.8 | 83.6 | 89.7 | 95.5 | 96.3 | 87.0 | 84.3 | 169.9 |
| 200 | 77.3 | 79.9 | 81.1 | 81.0 | 81.7 | 81.4 | 82.0 | 84.3 | 90.4 | 95.9 | 96.3 | 86.8 | 85.5 | 170.4 |
| 250 | 82.6 | 80.9 | 82.3 | 80.6 | 83.1 | 81.6 | 82.4 | 85.1 | 89.9 | 96.2 | 94.8 | 87.2 | 85.0 | 170.4 |
| 315 | 87.2 | 88.2 | 85.8 | 83.3 | 87.1 | 83.7 | 83.0 | 85.3 | 90.6 | 93.9 | 93.5 | 85.5 | 83.2 | 170.2 |
| 400 | 86.4 | 87.3 | 89.4 | 89.2 | 91.6 | 86.3 | 84.6 | 86.9 | 90.0 | 92.8 | 91.5 | 83.9 | 81.5 | 170.5 |
| 500 | 84.3 | 86.9 | 89.3 | 91.6 | 91.3 | 88.6 | 86.2 | 86.3 | 89.6 | 93.1 | 90.7 | 81.8 | 78.6 | 170.8 |
| 630 | 83.9 | 85.3 | 86.3 | 88.4 | 89.0 | 88.3 | 87.9 | 87.8 | 89.4 | 90.8 | 88.2 | 79.8 | 76.8 | 169.7 |
| 800 | 82.2 | 83.6 | 84.8 | 86.3 | 87.6 | 86.5 | 87.2 | 87.5 | 88.9 | 90.4 | 86.2 | 77.5 | 77.9 | 169.1 |
| 1000 | 79.8 | 82.2 | 83.7 | 85.1 | 84.6 | 85.2 | 85.3 | 87.3 | 87.8 | 88.9 | 84.5 | 75.8 | 72.4 | 168.3 |
| 1250 | 74.8 | 78.6 | 80.3 | 83.1 | 84.0 | 84.1 | 85.0 | 86.6 | 86.2 | 86.3 | 82.2 | 73.2 | 69.5 | 167.3 |
| 1600 | 74.4 | 77.5 | 79.5 | 81.8 | 80.5 | 82.7 | 83.2 | 84.6 | 84.3 | 84.1 | 79.4 | 70.9 | 66.1 | 166.7 |
| 2000 | 69.6 | 73.5 | 75.9 | 78.3 | 77.7 | 79.8 | 80.4 | 82.0 | 81.0 | 80.7 | 74.0 | 66.3 | 60.0 | 165.0 |
| 2500 | 64.5 | 70.4 | 72.6 | 75.9 | 73.5 | 75.4 | 76.9 | 76.8 | 77.9 | 76.7 | 68.6 | 60.1 | 53.8 | 163.9 |
| 3150 | 56.0 | 63.5 | 65.9 | 70.3 | 69.7 | 71.1 | 71.9 | 70.5 | 71.8 | 72.4 | 62.3 | 50.0 | 39.1 | 162.7 |
| 4000 | 45.9 | 53.8 | 57.9 | 62.3 | 63.7 | 64.2 | 64.5 | 63.7 | 63.5 | 63.9 | 51.4 | 35.9 | 18.8 | 161.7 |
| 5000 | 31.4 | 40.9 | 47.5 | 53.7 | 50.3 | 54.3 | 53.7 | 53.0 | 52.6 | 48.5 | 34.8 | 16.8 | | 159.8 |
| 6300 | 8.6 | 21.6 | 29.1 | 37.1 | 33.2 | 36.8 | 37.3 | 34.6 | 37.3 | 28.0 | 11.9 | | | 158.6 |
| 8000 | | | 1.1 | 9.7 | 9.1 | 12.2 | 13.5 | 8.6 | 10.0 | 0.8 | | | | 158.5 |
| 10000 | | | | | | | | | | | | | | 156.6 |

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|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| OASPL | 93.4 | 94.7 | 95.8 | 96.9 | 98.0 | 96.1 | 95.8 | 97.1 | 100.5 | 105.1 | 104.8 | 96.7 | 93.3 | 181.4 |
| PWL | 98.6 | 100.4 | 102.1 | 103.9 | 104.5 | 103.0 | 103.2 | 104.4 | 106.2 | 105.6 | 107.7 | 99.4 | 96.0 | |
| PNT | 98.6 | 101.1 | 102.7 | 104.5 | 104.5 | 103.0 | 103.2 | 104.4 | 106.9 | 109.6 | 107.7 | 99.4 | 96.0 | |

DIAMETER RATIO 8.268 FREQUENCY SHIFT -9

TEST DATE 12-15-77 TAPE NO. N281 ALPHA SB59 TAMB 35.06
LOCATION C41 ANECH CH AERO. RDG. ADH019 PAMB 29.4523 RELHUM 79.20

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
0500 0506 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 112.78 M/SEC (370.0 FPS)

07/19/79 17.781

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X05070
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

| | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| FREQ | | | | | | | | | | | | | | |
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 78.5 | 85.6 | 83.3 | 83.9 | 85.0 | 88.1 | 90.0 | 91.4 | 93.3 | 98.4 | 103.0 | 106.2 | 108.9 | 140.5 |
| 315 | 80.4 | 83.7 | 84.2 | 87.0 | 87.6 | 88.7 | 90.3 | 92.2 | 95.2 | 99.7 | 104.9 | 108.1 | 110.7 | 142.3 |
| 400 | 81.9 | 84.9 | 85.7 | 86.7 | 88.6 | 89.2 | 91.8 | 94.0 | 96.7 | 104.3 | 108.7 | 110.3 | 113.0 | 145.0 |
| 500 | 84.0 | 86.0 | 86.0 | 87.6 | 90.2 | 91.0 | 91.9 | 94.1 | 97.8 | 106.1 | 110.5 | 111.7 | 113.6 | 146.2 |
| 630 | 87.6 | 87.4 | 87.9 | 89.7 | 92.5 | 91.6 | 93.8 | 95.7 | 99.4 | 107.9 | 112.1 | 113.0 | 115.2 | 147.8 |
| 800 | 88.8 | 87.4 | 89.1 | 91.2 | 94.0 | 93.1 | 94.8 | 98.4 | 101.4 | 109.0 | 113.6 | 112.8 | 115.4 | 148.5 |
| 1000 | 92.7 | 94.7 | 94.0 | 94.5 | 96.1 | 95.0 | 96.4 | 98.3 | 102.5 | 109.0 | 113.7 | 113.1 | 117.3 | 149.3 |
| 1250 | 89.5 | 94.1 | 93.6 | 95.1 | 98.4 | 97.6 | 98.7 | 100.6 | 103.0 | 108.4 | 114.0 | 112.7 | 117.4 | 149.4 |
| 1600 | 91.4 | 91.2 | 92.9 | 94.2 | 96.1 | 96.4 | 97.8 | 101.2 | 103.8 | 107.0 | 112.5 | 112.7 | 116.7 | 148.6 |
| 2000 | 103.9 | 102.2 | 104.0 | 103.0 | 105.6 | 99.8 | 99.6 | 101.5 | 104.6 | 108.3 | 114.0 | 119.8 | 125.3 | 155.0 |
| 2500 | 99.1 | 98.6 | 100.4 | 99.4 | 102.0 | 98.2 | 99.2 | 101.2 | 103.5 | 107.5 | 110.9 | 116.1 | 120.9 | 151.3 |
| 3150 | 99.6 | 99.7 | 99.7 | 98.5 | 96.7 | 98.5 | 101.4 | 103.6 | 105.7 | 108.2 | 110.9 | 114.7 | 147.1 | |
| 4000 | 96.9 | 97.0 | 97.8 | 99.0 | 101.6 | 99.8 | 99.1 | 100.8 | 103.2 | 103.9 | 107.0 | 111.5 | 116.0 | 147.5 |
| 5000 | 95.8 | 95.2 | 95.5 | 97.2 | 99.9 | 99.2 | 98.8 | 100.7 | 103.1 | 104.3 | 106.2 | 110.2 | 113.9 | 146.4 |
| 6300 | 93.7 | 94.1 | 94.4 | 95.9 | 97.5 | 97.9 | 98.2 | 100.4 | 101.8 | 102.8 | 104.8 | 108.1 | 112.3 | 145.1 |
| 8000 | 91.0 | 92.9 | 93.7 | 95.1 | 95.5 | 95.3 | 97.5 | 100.2 | 101.1 | 102.3 | 103.0 | 106.7 | 109.9 | 144.0 |
| 10000 | 89.0 | 90.6 | 91.8 | 93.4 | 94.7 | 95.8 | 96.7 | 99.6 | 99.7 | 100.6 | 100.9 | 104.8 | 105.9 | 143.2 |
| 12500 | 85.7 | 88.1 | 89.0 | 91.0 | 92.1 | 94.0 | 95.1 | 97.5 | 97.5 | 97.7 | 98.6 | 102.3 | 106.0 | 141.5 |
| 16000 | 83.4 | 86.7 | 87.5 | 89.7 | 89.2 | 92.4 | 93.0 | 95.7 | 95.5 | 95.8 | 95.8 | 100.6 | 103.8 | 140.8 |
| 20000 | 79.3 | 83.2 | 83.5 | 86.4 | 85.8 | 87.9 | 90.3 | 91.3 | 92.1 | 91.7 | 91.9 | 94.9 | 97.3 | 137.9 |
| 25000 | 75.1 | 78.5 | 79.8 | 82.6 | 83.3 | 85.3 | 86.2 | 86.4 | 89.5 | 88.1 | 87.8 | 91.1 | 94.4 | 136.8 |
| 31500 | 72.0 | 73.6 | 76.9 | 80.2 | 80.9 | 81.1 | 82.0 | 83.2 | 84.9 | 86.2 | 85.6 | 86.4 | 89.4 | 136.3 |
| 40000 | 67.4 | 69.1 | 71.6 | 75.4 | 73.9 | 76.2 | 76.8 | 78.5 | 80.1 | 80.6 | 81.1 | 81.1 | 84.2 | 135.1 |
| 50000 | 60.9 | 61.8 | 66.5 | 68.8 | 69.2 | 69.2 | 71.3 | 70.9 | 74.8 | 72.2 | 74.2 | 75.4 | 78.4 | 133.2 |
| 63000 | 58.0 | 54.8 | 62.0 | 64.2 | 66.5 | 62.4 | 66.3 | 64.6 | 70.1 | 64.5 | 68.7 | 72.1 | 71.5 | 133.4 |
| 80000 | 56.5 | 50.9 | 59.2 | 61.5 | 64.9 | 56.0 | 59.6 | 58.3 | 62.3 | 59.1 | 63.1 | 65.0 | 64.8 | 134.6 |
| GASPL | 106.9 | 107.7 | 108.6 | 108.8 | 110.8 | 109.0 | 109.7 | 112.0 | 114.3 | 118.4 | 122.8 | 125.1 | 129.4 | 160.8 |

ORIGINAL PAGE IS
OF POOR QUALITY

| | | | | | | | |
|-----------|-----------------|----------------|-----------------------|------------------------------------|---------|----------------|-----------------|
| TEST DATE | 12-15-77 | TAPE NO. | N281 | ALPHA | SB59 | TAMB | 41.36 |
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH004 | PAMB | 29.4720 | RELHUM | 68.20 |
| MODEL | TEST POINT 0507 | ACOUSTIC RANGE | 12.2 M (40.0 FT) ARC | 131.5 SQ CM (20.38 SQ IN) - MODEL | 0. | FREE-JET SPEED | M/SEC (0. FPS) |

07/19/79 17.761

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X05070

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 50 | 50.5 | 51.5 | 52.5 | 53.5 | 54.5 | 55.5 | 56.5 | 57.5 | 58.5 | 59.5 | 60.5 | 61.5 | 62.5 | 63.5 | 64.5 | 65.5 | 66.5 | 67.5 | 68.5 | 69.5 | 70.5 | 71.5 | 72.5 | 73.5 | 74.5 | 75.5 | 76.5 | 77.5 | 78.5 | 79.5 | 80.5 | 81.5 | 82.5 | 83.5 | 84.5 | 85.5 | 86.5 | 87.5 | 88.5 | 89.5 | 90.5 | 91.5 | 92.5 | 93.5 | 94.5 | 95.5 | 96.5 | 97.5 | 98.5 | 99.5 | 100.5 | 101.5 | 102.5 | 103.5 | 104.5 | 105.5 | 106.5 | 107.5 | 108.5 | 109.5 | 110.5 | 111.5 | 112.5 | 113.5 | 114.5 | 115.5 | 116.5 | 117.5 | 118.5 | 119.5 | 120.5 | 121.5 | 122.5 | 123.5 | 124.5 | 125.5 | 126.5 | 127.5 | 128.5 | 129.5 | 130.5 | 131.5 | 132.5 | 133.5 | 134.5 | 135.5 | 136.5 | 137.5 | 138.5 | 139.5 | 140.5 | 141.5 | 142.5 | 143.5 | 144.5 | 145.5 | 146.5 | 147.5 | 148.5 | 149.5 | 150.5 | 151.5 | 152.5 | 153.5 | 154.5 | 155.5 | 156.5 | 157.5 | 158.5 | 159.5 | 160.5 | 161.5 | 162.5 | 163.5 | 164.5 | 165.5 | 166.5 | 167.5 | 168.5 | 169.5 | 170.5 | 171.5 | 172.5 | 173.5 | 174.5 | 175.5 | 176.5 | 177.5 | 178.5 | 179.5 | 180.5 | 181.5 | 182.5 | 183.5 | 184.5 | 185.5 | 186.5 | 187.5 | 188.5 | 189.5 | 190.5 | 191.5 | 192.5 | 193.5 | 194.5 | 195.5 | 196.5 | 197.5 | 198.5 | 199.5 | 200.5 | 201.5 | 202.5 | 203.5 | 204.5 | 205.5 | 206.5 | 207.5 | 208.5 | 209.5 | 210.5 | 211.5 | 212.5 | 213.5 | 214.5 | 215.5 | 216.5 | 217.5 | 218.5 | 219.5 | 220.5 | 221.5 | 222.5 | 223.5 | 224.5 | 225.5 | 226.5 | 227.5 | 228.5 | 229.5 | 230.5 | 231.5 | 232.5 | 233.5 | 234.5 | 235.5 | 236.5 | 237.5 | 238.5 | 239.5 | 240.5 | 241.5 | 242.5 | 243.5 | 244.5 | 245.5 | 246.5 | 247.5 | 248.5 | 249.5 | 250.5 | 251.5 | 252.5 | 253.5 | 254.5 | 255.5 | 256.5 | 257.5 | 258.5 | 259.5 | 260.5 | 261.5 | 262.5 | 263.5 | 264.5 | 265.5 | 266.5 | 267.5 | 268.5 | 269.5 | 270.5 | 271.5 | 272.5 | 273.5 | 274.5 | 275.5 | 276.5 | 277.5 | 278.5 | 279.5 | 280.5 | 281.5 | 282.5 | 283.5 | 284.5 | 285.5 | 286.5 | 287.5 | 288.5 | 289.5 | 290.5 | 291.5 | 292.5 | 293.5 | 294.5 | 295.5 | 296.5 | 297.5 | 298.5 | 299.5 | 300.5 | 301.5 | 302.5 | 303.5 | 304.5 | 305.5 | 306.5 | 307.5 | 308.5 | 309.5 | 310.5 | 311.5 | 312.5 | 313.5 | 314.5 | 315.5 | 316.5 | 317.5 | 318.5 | 319.5 | 320.5 | 321.5 | 322.5 | 323.5 | 324.5 | 325.5 | 326.5 | 327.5 | 328.5 | 329.5 | 330.5 | 331.5 | 332.5 | 333.5 | 334.5 | 335.5 | 336.5 | 337.5 | 338.5 | 339.5 | 340.5 | 341.5 | 342.5 | 343.5 | 344.5 | 345.5 | 346.5 | 347.5 | 348.5 | 349.5 | 350.5 | 351.5 | 352.5 | 353.5 | 354.5 | 355.5 | 356.5 | 357.5 | 358.5 | 359.5 | 360.5 | 361.5 | 362.5 | 363.5 | 364.5 | 365.5 | 366.5 | 367.5 | 368.5 | 369.5 | 370.5 | 371.5 | 372.5 | 373.5 | 374.5 | 375.5 | 376.5 | 377.5 | 378.5 | 379.5 | 380.5 | 381.5 | 382.5 | 383.5 | 384.5 | 385.5 | 386.5 | 387.5 | 388.5 | 389.5 | 390.5 | 391.5 | 392.5 | 393.5 | 394.5 | 395.5 | 396.5 | 397.5 | 398.5 | 399.5 | 400.5 | 401.5 | 402.5 | 403.5 | 404.5 | 405.5 | 406.5 | 407.5 | 408.5 | 409.5 | 410.5 | 411.5 | 412.5 | 413.5 | 414.5 | 415.5 | 416.5 | 417.5 | 418.5 | 419.5 | 420.5 | 421.5 | 422.5 | 423.5 | 424.5 | 425.5 | 426.5 | 427.5 | 428.5 | 429.5 | 430.5 | 431.5 | 432.5 | 433.5 | 434.5 | 435.5 | 436.5 | 437.5 | 438.5 | 439.5 | 440.5 | 441.5 | 442.5 | 443.5 | 444.5 | 445.5 | 446.5 | 447.5 | 448.5 | 449.5 | 450.5 | 451.5 | 452.5 | 453.5 | 454.5 | 455.5 | 456.5 | 457.5 | 458.5 | 459.5 | 460.5 | 461.5 | 462.5 | 463.5 | 464.5 | 465.5 | 466.5 | 467.5 | 468.5 | 469.5 | 470.5 | 471.5 | 472.5 | 473.5 | 474.5 | 475.5 | 476.5 | 477.5 | 478.5 | 479.5 | 480.5 | 481.5 | 482.5 | 483.5 | 484.5 | 485.5 | 486.5 | 487.5 | 488.5 | 489.5 | 490.5 | 491.5 | 492.5 | 493.5 | 494.5 | 495.5 | 496.5 | 497.5 | 498.5 | 499.5 | 500.5 | 501.5 | 502.5 | 503.5 | 504.5 | 505.5 | 506.5 | 507.5 | 508.5 | 509.5 | 510.5 | 511.5 | 512.5 | 513.5 | 514.5 | 515.5 | 516.5 | 517.5 | 518.5 | 519.5 | 520.5 | 521.5 | 522.5 | 523.5 | 524.5 | 525.5 | 526.5 | 527.5 | 528.5 | 529.5 | 530.5 | 531.5 | 532.5 | 533.5 | 534.5 | 535.5 | 536.5 | 537.5 | 538.5 | 539.5 | 540.5 | 541.5 | 542.5 | 543.5 | 544.5 | 545.5 | 546.5 | 547.5 | 548.5 | 549.5 | 550.5 | 551.5 | 552.5 | 553.5 | 554.5 | 555.5 | 556.5 | 557.5 | 558.5 | 559.5 | 560.5 | 561.5 | 562.5 | 563.5 | 564.5 | 565.5 | 566.5 | 567.5 | 568.5 | 569.5 | 570.5 | 571.5 | 572.5 | 573.5 | 574.5 | 575.5 | 576.5 | 577.5 | 578.5 | 579.5 | 580.5 | 581.5 | 582.5 | 583.5 | 584.5 | 585.5 | 586.5 | 587.5 | 588.5 | 589.5 | 590.5 | 591.5 | 592.5 | 593.5 | 594.5 | 595.5 | 596.5 | 597.5 | 598.5 | 599.5 | 600.5 | 601.5 | 602.5 | 603.5 | 604.5 | 605.5 | 606.5 | 607.5 | 608.5 | 609.5 | 610.5 | 611.5 | 612.5 | 613.5 | 614.5 | 615.5 | 616.5 | 617.5 | 618.5 | 619.5 | 620.5 | 621.5 | 622.5 | 623.5 | 624.5 | 625.5 | 626.5 | 627.5 | 628.5 | 629.5 | 630.5 | 631.5 | 632.5 | 633.5 | 634.5 | 635.5 | 636.5 | 637.5 | 638.5 | 639.5 | 640.5 | 641.5 | 642.5 | 643.5 | 644.5 | 645.5 | 646.5 | 647.5 | 648.5 | 649.5 | 650.5 | 651.5 | 652.5 | 653.5 | 654.5 | 655.5 | 656.5 | 657.5 | 658.5 | 659.5 | 660.5 | 661.5 | 662.5 | 663.5 | 664.5 | 665.5 | 666.5 | 667.5 | 668.5 | 669.5 | 670.5 | 671.5 | 672.5 | 673.5 | 674.5 | 675.5 | 676.5 | 677.5 | 678.5 | 679.5 | 680.5 | 681.5 | 682.5 | 683.5 | 684.5 | 685.5 | 686.5 | 687.5 | 688.5 | 689.5 | 690.5 | 691.5 | 692.5 | 693.5 | 694.5 | 695.5 | 696.5 | 697.5 | 698.5 | 699.5 | 700.5 | 701.5 | 702.5 | 703.5 | 704.5 | 705.5 | 706.5 | 707.5 | 708.5 | 709.5 | 710.5 | 711.5 | 712.5 | 713.5 | 714.5 | 715.5 | 716.5 | 717.5 | 718.5 | 719.5 | 720.5 | 721.5 | 722.5 | 723.5 | 724.5 | 725.5 | 726.5 | 727.5 | 728.5 | 729.5 | 730.5 | 731.5 | 732.5 | 733.5 | 734.5 | 735.5 | 736.5 | 737.5 | 738.5 | 739.5 | 740.5 | 741.5 | 742.5 | 743.5 | 744.5 | 745.5 | 746.5 | 747.5 | 748.5 | 749.5 | 750.5 | 751.5 | 752.5 | 753.5 | 754.5 | 755.5 | 756.5 | 757.5 | 758.5 | 759.5 | 760.5 | 761.5 | 762.5 | 763.5 | 764.5 | 765.5 | 766.5 | 767.5 | 768.5 | 769.5 | 770.5 | 771.5 | 772.5 | 773.5 | 774.5 | 775.5 | 776.5 | 777.5 | 778.5 | 779.5 | 780.5 | 781.5 | 782.5 | 783.5 | 784.5 | 785.5 | 786.5 | 787.5 | 788.5 | 789.5 | 790.5 | 791.5 | 792.5 | 793.5 | 794.5 | 795.5 | 796.5 | 797.5 | 798.5 | 799.5 | 800.5 | 801.5 | 802.5 | 803.5 | 804.5 | 805.5 | 806.5 | 807.5 | 808.5 | 809.5 | 810.5 | 811.5 | 812.5 | 813.5 | 814.5 | 815.5 | 816.5 | 817.5 | 818.5 | 819.5 | 820.5 | 821.5 | 822.5 | 823.5 | 824.5 | 825.5 | 826.5 | 827.5 | 828.5 | 829.5 | 830.5 | 831.5 | 832.5 | 833.5 | 834.5 | 835.5 | 836.5 | 837.5 | 838.5 | 839.5 | 840.5 | 841.5 | 842.5 | 843.5 | 844.5 | 845.5 | 846.5 | 847.5 | 848.5 | 849.5 | 850.5 | 851.5 | 852.5 | 853.5 | 854.5 | 855.5 | 856.5 | 857.5 | 858.5 | 859.5 | 860.5 | 861.5 | 862.5 | 863.5 | 864.5 | 865.5 | 866.5 | 867.5 | 868.5 | 869.5 | 870.5 | 871.5 | 872.5 | 873.5 | 874.5 | 875.5 | 876.5 | 877.5 | 878.5 | 879.5 | 880.5 | 881.5 | 882.5 | 883.5 | 884.5 | 885.5 | 886.5 | 887.5 | 888.5 | 889.5 | 890.5 | 891.5 | 892.5 | 893.5 | 894.5 | 895.5 | 896.5 | 897.5 | 898.5 | 899.5 | 900.5 | 901.5 | 902.5 | 903.5 | 904.5 | 905.5 | 906.5 | 907.5 | 908.5 | 909.5 | 910.5 | 911.5 | 912.5 | 913.5 | 914.5 | 915.5 | 916.5 | 917.5 | 918.5 | 919.5 | 920.5 | 921.5 | 922.5 | 923.5 | 924.5 | 925.5 | 926.5 | 927.5 | 928.5 | 929.5 | 930.5 | 931.5 | 932.5 | 933.5 | 934.5 | 935.5 | 936.5 | 937.5 | 938.5 | 939.5 | 940.5 | 941.5 | 942.5 | 943.5 | 944.5 | 945.5 | 946.5 | 947.5 | 948.5 | 949.5 | 950.5 | 951.5 | 952.5 | 953.5 | 954.5 | 955.5 | 956.5 | 957.5 | 958.5 | 959.5 | 960.5 | 961.5 | 962.5 | 963.5 | 964.5 | 965.5 | 966.5 | 967.5 | 968.5 | 969.5 | 970.5 | 971.5 | 972.5 | 973.5 | 974.5 | 975.5 | 976.5 | 977.5 | 978.5 | 979.5 | 980.5 | 981.5 | 982.5 | 983.5 | 984.5 | 985.5 | 986.5 | 987.5 | 988.5 | 989.5 | 990.5 | 991.5 | 992.5 | 993.5 | 994.5 | 995.5 | 996.5 | 997.5 | 998.5 | 999.5 | 1000.5 | 1001.5 | 1002.5 | 1003.5 | 1004.5 | 1005.5 | 1006.5 | 1007.5 | 1008.5 | 1009.5 | 1010.5 | 1011.5 | 1012.5 | 1013.5 | 1014.5 | 1015.5 | 1016.5 | 1017.5 | 1018.5 | 1019.5 | 1020.5 | 1021.5 | 1022.5 | 1023.5 | 1024.5 | 1025.5 | 1026.5 | 1027.5 | 1028.5 | 1029.5 | 1030.5 | 1031.5 | 1032.5 | 1033.5 | 1034.5 | 1035.5 | 1036.5 | 1037.5 | 1038.5 | 1039.5 | 1040.5 | 1041.5 | 1042.5 | 1043.5 | 1044.5 | 1045.5 | 1046.5 | 1047.5 | 1048.5 | 1049.5 | 1050.5 | 1051.5 | 1052.5 | 1053.5 | 1054.5 | 1055.5 | 1056.5 | 1057.5 | 1058.5 | 1059.5 | 1060.5 | 1061.5 | 1062.5 | 1063.5 | 1064.5 | 1065.5 | 1066.5 | 1067.5 | 1068.5 | 1069.5 | 1070.5 | 1071.5 | 1072.5 | 1073.5 | 1074.5 | 1075.5 | 1076.5 | 1077.5 | 1078.5 | 1079.5 | 1080.5 | 1081.5 | 1082.5 | 1083.5 | 1084.5 | 1085.5 | 1086.5 | 1087.5 | 1088.5 | 1089.5 | 1090.5 | 1091.5 | 1092.5 | 1093.5 | 1094.5 | 1095.5 | 1096.5 | 1097.5 | 1098.5 | 1099.5 | 1100.5 | 1101.5 | 1102.5 | 1103.5 | 1104.5 | 1105.5 | 1106.5 | 1107.5 | 1108.5 | 1109.5 | 1110.5 | 1111.5 | 1112.5 | 1113.5 | 1114.5 | 1115.5 | 1116.5 | 1117.5 | 1118.5 | 1119.5 | 1120.5 | 1121.5 | 1122.5 | 1123.5 | 1124.5 | 1125.5 | 1126.5 | 1127.5 | 1128.5 | 1129.5 | 1130.5 | 1131.5 | 1132.5 | 1133.5 | 1134.5 | 1135.5 | 1136.5 | 1137.5 | 1138.5 | 1139.5 | 1140.5 | 1141.5 | 1142.5 | 1143.5 | 1144.5 | 1145.5 | 1146.5 | 1147.5 | 1148.5 | 1149.5 | 1150.5 | 1151.5 | 1152.5 | 1153.5 | 1154.5 | 1155.5 | 1156.5 | 1157.5 | 1158.5 | 1159.5 | 1160.5 | 1161.5 | 1162.5 | 1163.5 | 1164.5 | 1165.5 | 1166.5 | 1167.5 | 1168.5 | 1169.5 | 1170.5 | 1171.5 | 1172.5 | 1173.5 | 1174.5 | 1175.5 | 1176.5 | 1177.5 | 1178.5 | 1179.5 | 1180.5 | 1181.5 | 1182.5 | 1183.5 | 1184.5 | 1185.5 | 1186.5 | 1187.5 | 1188.5 | 1189.5 | 1190.5 | 1191.5 | 1192.5 | 1193.5 | 1194.5 | 1195.5 | 1196.5 | 1197.5 | 1198.5 | 1199.5 | 1200.5 | 1201.5 | 1202.5 | 1203.5 | 1204.5 | 1205.5 | 1206.5 | 1207.5 | 1208.5 | 1209.5 | 1210.5 | 1211.5 | 1212.5 | 1213.5 | 1214.5 | 1215.5 | 1216.5 | 1217.5 | 1218.5 | 1219.5 | 1220.5 | 1221.5 | 1222.5 | 1223.5 | 1224.5 | 1225.5 | 1226.5 | 1227.5 | 1228.5 | 1229.5 | 1230.5 | 1231.5 | 1232.5 | 1233.5 | 1234.5 |
|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|

07/19/79 17.781

376

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X05075

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 60.8 | 65.4 | 67.2 | 69.0 | 71.2 | 72.0 | 74.5 | 76.2 | 78.2 | 84.7 | 87.6 | 87.1 | 86.4 | 163.3 |
| 63 | 62.9 | 66.5 | 67.5 | 69.8 | 72.8 | 73.8 | 74.5 | 76.3 | 79.3 | 86.5 | 89.4 | 88.4 | 86.9 | 164.6 |
| 80 | 66.4 | 67.8 | 69.4 | 71.9 | 75.1 | 74.4 | 76.4 | 77.9 | 80.9 | 88.3 | 90.9 | 89.6 | 88.4 | 166.2 |
| 100 | 67.6 | 67.7 | 70.6 | 73.3 | 76.6 | 75.8 | 77.3 | 80.6 | 82.8 | 89.3 | 92.4 | 89.3 | 88.5 | 166.9 |
| 125 | 71.3 | 74.9 | 75.3 | 76.6 | 78.6 | 77.6 | 78.6 | 81.3 | 83.8 | 89.3 | 92.5 | 89.5 | 90.1 | 167.7 |
| 160 | 68.0 | 74.1 | 74.8 | 77.0 | 80.8 | 80.1 | 81.1 | 82.5 | 84.2 | 88.5 | 92.5 | 88.8 | 89.8 | 167.8 |
| 200 | 69.6 | 71.0 | 74.0 | 76.0 | 78.3 | 78.8 | 80.0 | 83.0 | 84.9 | 86.9 | 90.7 | 88.5 | 88.7 | 167.0 |
| 250 | 78.8 | 81.8 | 84.8 | 84.6 | 87.6 | 82.0 | 81.6 | 83.1 | 85.4 | 87.9 | 91.9 | 95.1 | 96.6 | 173.4 |
| 315 | 76.5 | 77.9 | 80.9 | 80.7 | 83.7 | 80.1 | 81.0 | 82.4 | 84.0 | 86.7 | 88.4 | 91.0 | 91.4 | 169.7 |
| 400 | 76.5 | 78.7 | 79.8 | 80.6 | 79.9 | 78.3 | 79.9 | 82.4 | 83.9 | 84.6 | 85.2 | 85.1 | 84.2 | 165.5 |
| 500 | 73.4 | 75.4 | 77.6 | 79.7 | 82.8 | 81.1 | 80.3 | 81.4 | 83.0 | 82.3 | 83.5 | 85.0 | 84.5 | 165.9 |
| 630 | 71.8 | 73.3 | 74.9 | 77.6 | 80.8 | 80.3 | 79.7 | 81.1 | 82.6 | 82.4 | 83.2 | 83.0 | 81.4 | 164.8 |
| 800 | 69.2 | 71.8 | 73.6 | 76.0 | 78.2 | 78.7 | 78.8 | 80.5 | 81.0 | 80.5 | 80.3 | 80.3 | 78.7 | 163.4 |
| 1000 | 66.0 | 70.2 | 72.7 | 75.0 | 76.0 | 77.0 | 78.1 | 80.1 | 80.1 | 79.7 | 78.1 | 75.2 | 75.2 | 162.3 |
| 1250 | 63.5 | 67.7 | 70.5 | 73.1 | 75.1 | 76.4 | 77.1 | 79.3 | 78.4 | 77.6 | 75.4 | 75.5 | 72.7 | 161.5 |
| 1600 | 59.4 | 64.5 | 67.3 | 70.4 | 72.1 | 74.3 | 75.1 | 76.9 | 75.6 | 74.1 | 72.3 | 71.6 | 67.4 | 159.3 |
| 2000 | 55.1 | 62.6 | 65.4 | 68.9 | 69.2 | 72.5 | 72.9 | 74.9 | 73.4 | 71.7 | 68.5 | 68.3 | 62.2 | 159.2 |
| 2500 | 50.2 | 57.9 | 60.6 | 64.9 | 65.2 | 67.5 | 69.7 | 69.8 | 69.1 | 66.4 | 62.9 | 59.7 | 50.8 | 156.3 |
| 3150 | 42.7 | 50.7 | 54.9 | 59.6 | 61.2 | 63.6 | 64.2 | 63.4 | 64.7 | 60.3 | 55.4 | 51.0 | 39.4 | 155.2 |
| 4000 | 33.4 | 41.1 | 48.2 | 53.9 | 55.9 | 56.6 | 57.0 | 56.9 | 56.2 | 53.7 | 47.0 | 37.4 | 20.0 | 154.6 |
| 5000 | 18.9 | 29.0 | 36.7 | 43.7 | 43.9 | 45.8 | 46.8 | 46.8 | 45.2 | 40.5 | 32.6 | 18.4 | | 153.5 |
| 6300 | | 7.5 | 19.5 | 26.3 | 29.2 | 29.9 | 31.2 | 29.4 | 27.8 | 17.9 | 8.0 | | | 151.5 |
| 8000 | | | | | | | | | | | | | | 151.7 |
| 10000 | | | | | | | | | | | | | | 153.1 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GASPL 84.2 86.7 89.0 89.9 92.5 90.5 91.1 93.0 94.6 98.0 100.9 100.4 100.8 179.1
 PWL 88.4 91.8 94.4 95.7 98.2 96.5 97.0 98.7 99.7 101.3 103.3 104.2 104.2
 PWL 82.4 93.0 95.6 96.8 93.3 96.5 97.0 98.7 99.7 102.4 104.5 105.1 105.3

DIAMETER RATIO 8.288 FREQUENCY SHIFT -9

TEST DATE 12-15-77 TAPE NO. N281 ALPHA SB59 TAMB 41.36
 LOCATION C41 ANECH CH AERO. RDG. ADH004 PAMB 29.4720 RELNUM 68.20

MODEL TEST POINT 0507 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE FREE-JET SPEED
 0500 0. M/SEC (0. FPS)

07/19/79 17.781

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 40.0 FT., ARC

IDENTIFICATION - MODEL FJ-300-FMODL X05080
BACKGROUND FJB300-FMODL X05230

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

CASPL

102.2

102.9

103.7

104.6

105.7

104.1

105.4

108.0

110.3

114.5

118.7

115.6

111.2

153.2

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OF POOR QUALITY

TEST DATE 12-15-77 TAPE NO. N261 ALPHA S853 TAMB 36.14
LOCATION C-41 ANECH CH AERO. RDG. ADH015 PAMB 29.4582 RELHUM 77.20

MODEL TEST POINT 0500 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.38 SQ IN) - MODEL 84.73 M/SEC (278.0 FPS) FREE-JET SPEED

07/19/79 17.781

378

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X05080

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|------|------|------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | | | | | | | | | | | | | | |
| 315 | | | | | | | | | | | | | | |
| 400 | 79.9 | 83.2 | 81.7 | 81.5 | 81.5 | 82.3 | 83.3 | 84.0 | 87.9 | 92.5 | 97.5 | 100.7 | 102.6 | 134.7 |
| 500 | 81.0 | 82.7 | 82.2 | 84.0 | 84.5 | 85.5 | 86.5 | 87.2 | 91.8 | 97.2 | 101.7 | 103.2 | 103.0 | 137.2 |
| 630 | 83.6 | 84.3 | 83.5 | 86.2 | 87.1 | 87.2 | 87.3 | 88.8 | 90.6 | 96.0 | 103.3 | 108.9 | 106.5 | 141.1 |
| 800 | 85.4 | 85.3 | 84.6 | 87.2 | 88.9 | 87.3 | 88.8 | 90.6 | 96.0 | 103.3 | 108.9 | 106.5 | 100.8 | 142.0 |
| 1000 | 87.7 | 85.9 | 86.0 | 89.1 | 89.8 | 89.1 | 90.2 | 92.5 | 97.4 | 104.0 | 109.5 | 106.6 | 102.7 | 142.7 |
| 1250 | 88.5 | 86.7 | 88.1 | 90.2 | 90.2 | 90.5 | 91.4 | 92.9 | 97.9 | 103.1 | 109.7 | 105.7 | 102.6 | 142.6 |
| 1600 | 89.1 | 88.6 | 89.4 | 91.1 | 93.6 | 91.7 | 92.6 | 94.6 | 98.5 | 102.5 | 107.6 | 105.3 | 101.7 | 141.5 |
| 2000 | 89.2 | 89.9 | 90.3 | 91.0 | 92.1 | 91.9 | 92.6 | 95.3 | 99.3 | 104.2 | 109.4 | 108.9 | 106.0 | 143.7 |
| 2500 | 90.8 | 88.3 | 89.9 | 95.2 | 95.5 | 92.7 | 93.4 | 95.3 | 98.6 | 102.3 | 103.3 | 100.4 | 98.6 | 139.5 |
| 3150 | 96.4 | 91.5 | 95.0 | 93.6 | 93.2 | 92.7 | 93.2 | 95.5 | 99.6 | 100.5 | 101.6 | 98.3 | 97.8 | 139.0 |
| 4000 | 102.9 | 104.5 | 103.3 | 102.8 | 103.9 | 97.1 | 94.9 | 96.4 | 99.7 | 100.2 | 99.6 | 95.1 | 94.5 | 143.4 |
| 5000 | 98.0 | 99.4 | 100.8 | 95.1 | 98.3 | 97.3 | 96.8 | 96.8 | 99.3 | 99.7 | 98.0 | 94.0 | 94.3 | 140.7 |
| 6300 | 96.5 | 96.1 | 95.7 | 95.6 | 95.5 | 95.6 | 96.7 | 97.4 | 100.2 | 100.0 | 97.2 | 92.8 | 92.9 | 139.7 |
| 8000 | 94.0 | 95.0 | 94.6 | 95.3 | 94.6 | 94.8 | 95.6 | 97.8 | 98.8 | 98.5 | 95.5 | 92.0 | 92.6 | 139.1 |
| 10000 | 91.1 | 93.1 | 93.5 | 93.7 | 94.2 | 94.3 | 95.7 | 97.8 | 97.6 | 96.8 | 93.7 | 90.4 | 90.6 | 138.6 |
| 12500 | 89.1 | 90.5 | 91.5 | 91.0 | 90.8 | 92.5 | 93.2 | 95.9 | 95.9 | 94.7 | 91.7 | 88.5 | 89.2 | 137.3 |
| 16000 | 85.5 | 87.3 | 88.1 | 90.1 | 89.0 | 91.0 | 91.5 | 93.8 | 93.0 | 91.4 | 87.6 | 84.8 | 86.5 | 136.3 |
| 20000 | 84.5 | 87.0 | 87.3 | 87.5 | 85.0 | 87.1 | 88.8 | 89.3 | 90.5 | 87.9 | 84.3 | 82.2 | 86.3 | 135.1 |
| 25000 | 78.9 | 82.5 | 82.3 | 83.3 | 82.8 | 84.4 | 84.9 | 84.8 | 86.4 | 85.7 | 81.9 | 78.0 | 80.0 | 133.7 |
| 31500 | 74.9 | 77.3 | 78.4 | 80.7 | 80.3 | 80.1 | 80.9 | 80.9 | 81.0 | 80.3 | 77.3 | 72.7 | 75.1 | 132.7 |
| 40000 | 70.8 | 72.2 | 74.0 | 75.3 | 72.9 | 75.1 | 75.4 | 75.6 | 76.4 | 72.3 | 70.3 | 66.9 | 68.9 | 131.1 |
| 50000 | 64.7 | 66.4 | 67.2 | 68.2 | 66.9 | 67.5 | 70.0 | 68.0 | 71.6 | 65.0 | 64.2 | 61.5 | 62.9 | 129.2 |
| 63000 | 56.2 | 58.6 | 60.1 | 60.7 | 63.7 | 60.4 | 63.0 | 60.9 | 65.2 | 60.2 | 59.3 | 53.8 | 55.4 | 128.1 |
| 80000 | 48.7 | 50.8 | 51.9 | 55.9 | 60.7 | 54.2 | 55.5 | 54.5 | 55.4 | 50.4 | 49.5 | 44.0 | 45.6 | 128.5 |

QASPL 107.7 107.9 107.7 107.9 108.0 105.6 106.0 107.7 110.4 113.6 117.7 116.0 113.2 153.6

MODEL/FULL SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 278.00 REFRACTION CORRECTION - YES
INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 12-15-77 TAPE NO. N281 IALPHA SB59 TAMB 36.14
LOCATION C41 ANECH CH AERO. RDG. ADH015 PAMB 29.4582 RELHUM 77.20

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
0500 0508 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.38 SQ IN) - MODEL 84.73 M/SEC (276.0 FPS)

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FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FM00L X05085

ANGLES MEASURED FROM INLET DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 59.9 | 63.1 | 63.7 | 66.3 | 67.4 | 67.3 | 68.5 | 68.4 | 73.4 | 81.0 | 84.6 | 82.6 | 77.0 | 158.3 |
| 63 | 62.5 | 64.7 | 65.1 | 68.4 | 69.8 | 69.9 | 70.0 | 71.0 | 75.5 | 82.2 | 86.2 | 83.6 | 75.4 | 159.4 |
| 80 | 64.3 | 65.7 | 66.1 | 69.4 | 71.5 | 70.0 | 71.4 | 72.8 | 77.5 | 83.7 | 87.7 | 83.1 | 74.0 | 160.4 |
| 100 | 66.5 | 66.3 | 67.4 | 71.2 | 72.4 | 71.8 | 72.8 | 74.6 | 78.8 | 83.3 | 88.3 | 83.1 | 75.8 | 161.0 |
| 125 | 67.2 | 67.0 | 68.4 | 72.3 | 74.5 | 73.2 | 73.9 | 75.0 | 79.3 | 83.4 | 88.3 | 82.1 | 75.4 | 160.9 |
| 160 | 67.6 | 68.7 | 70.6 | 73.0 | 74.2 | 74.9 | 76.5 | 79.7 | 82.6 | 86.1 | 91.4 | 84.2 | 78.0 | 159.9 |
| 200 | 66.4 | 69.8 | 71.3 | 72.8 | 74.3 | 74.3 | 74.8 | 77.1 | 80.3 | 84.0 | 87.6 | 84.7 | 78.0 | 162.1 |
| 250 | 68.7 | 67.9 | 70.7 | 76.7 | 77.5 | 74.8 | 75.4 | 76.8 | 79.4 | 81.9 | 81.2 | 75.7 | 70.0 | 158.0 |
| 315 | 73.9 | 70.8 | 75.5 | 74.9 | 74.9 | 74.9 | 75.0 | 76.8 | 80.1 | 79.8 | 79.1 | 73.2 | 68.3 | 152.4 |
| 400 | 78.0 | 77.7 | 77.3 | 82.6 | 79.2 | 74.5 | 75.4 | 77.4 | 78.9 | 78.8 | 76.7 | 70.9 | 65.6 | 159.0 |
| 500 | 79.4 | 82.9 | 83.1 | 83.5 | 85.0 | 78.4 | 76.1 | 77.0 | 79.5 | 78.6 | 75.9 | 69.6 | 63.0 | 161.8 |
| 630 | 74.0 | 77.5 | 80.3 | 76.5 | 79.2 | 78.4 | 77.7 | 77.1 | 78.8 | 77.6 | 74.0 | 66.8 | 61.8 | 159.0 |
| 800 | 73.0 | 73.8 | 74.8 | 75.7 | 76.1 | 76.4 | 77.3 | 77.6 | 79.3 | 77.7 | 72.7 | 65.0 | 59.3 | 158.1 |
| 1000 | 69.1 | 72.4 | 73.6 | 75.3 | 75.1 | 75.5 | 76.1 | 77.8 | 77.8 | 75.3 | 70.6 | 63.5 | 57.9 | 157.5 |
| 1250 | 65.7 | 70.2 | 72.2 | 73.4 | 74.6 | 74.9 | 76.0 | 77.6 | 76.3 | 73.9 | 68.3 | 61.1 | 54.4 | 157.0 |
| 1600 | 62.8 | 66.9 | 69.8 | 70.4 | 70.9 | 72.8 | 73.3 | 75.3 | 74.1 | 71.2 | 65.3 | 57.8 | 50.6 | 155.7 |
| 2000 | 58.2 | 63.2 | 66.0 | 69.3 | 68.9 | 71.1 | 71.5 | 73.0 | 70.9 | 67.3 | 60.3 | 52.3 | 44.9 | 154.6 |
| 2500 | 55.4 | 61.6 | 64.3 | 66.0 | 64.3 | 66.8 | 68.1 | 67.8 | 67.5 | 62.5 | 55.2 | 47.1 | 39.8 | 153.5 |
| 3150 | 45.5 | 54.7 | 57.4 | 60.2 | 60.8 | 62.7 | 62.9 | 61.7 | 61.5 | 57.9 | 49.4 | 37.9 | 25.1 | 152.1 |
| 4000 | 36.2 | 44.8 | 49.7 | 54.4 | 55.3 | 55.5 | 55.9 | 54.6 | 52.3 | 47.8 | 38.6 | 23.7 | 5.7 | 151.0 |
| 5000 | 22.4 | 32.2 | 39.1 | 43.6 | 42.9 | 45.6 | 45.4 | 43.9 | 41.5 | 32.2 | 21.9 | 4.1 | | 149.5 |
| 6300 | 12.1 | 20.2 | 25.7 | 26.8 | 28.2 | 30.0 | 26.5 | 24.6 | 10.7 | | | | | 147.5 |
| 8000 | | | | 5.5 | 3.3 | 4.8 | | | | | | | | 146.5 |
| 10000 | | | | | | | | | | | | | | 146.8 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| GASPL | 84.3 | 86.3 | 87.4 | 88.7 | 89.2 | 86.9 | 87.1 | 88.4 | 90.6 | 93.1 | 96.0 | 91.8 | 84.8 | 171.8 |
| PWL | 89.9 | 92.9 | 94.1 | 95.4 | 96.3 | 93.8 | 94.2 | 95.4 | 96.0 | 96.5 | 97.3 | 92.6 | 85.6 | |
| PNT | 91.0 | 94.7 | 95.5 | 97.9 | 98.8 | 93.8 | 94.7 | 95.4 | 96.0 | 96.5 | 97.9 | 93.6 | 86.7 | |

DIAMETER RATIO 8.288 FREQUENCY SHIFT -9

TEST DATE 12-15-77 TAPE NO. N281 ALPHA SB59 TAMP 36.14
LOCATION C41 ANECH CH AERO. RDG. ADH015 PAMB 29.4562 RELHUM 77.20

MODEL TEST POINT 0508 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 84.73 M/SEC (278.0 FPS)
FREE-JET SPEED

07/19/79 17.781

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X05090
BACKGROUND FJB-100-FMODL X05220

ANGLES MEASURED FROM INLET, DEGREES

| | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| FREQ | | | | | | | | | | | | | | |
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 74.7 | 77.2 | 77.0 | 78.4 | 78.5 | 81.1 | 83.4 | 85.3 | 87.8 | 93.6 | 99.0 | 102.0 | 103.1 | 135.6 |
| 315 | 75.2 | 77.5 | 77.4 | 79.3 | 81.2 | 82.1 | 84.3 | 85.5 | 88.8 | 95.5 | 100.6 | 103.1 | 102.2 | 136.4 |
| 400 | 77.1 | 77.9 | 79.2 | 80.5 | 82.7 | 83.2 | 85.0 | 87.8 | 90.3 | 99.3 | 103.7 | 104.1 | 100.5 | 138.0 |
| 500 | 79.0 | 79.8 | 82.4 | 84.7 | 85.1 | 86.3 | 88.3 | 88.7 | 92.0 | 101.6 | 106.0 | 104.2 | 97.3 | 139.4 |
| 630 | 85.3 | 81.3 | 82.2 | 83.5 | 86.9 | 86.7 | 88.4 | 90.6 | 94.1 | 102.4 | 107.6 | 104.0 | 95.2 | 140.6 |
| 800 | 82.0 | 80.5 | 82.8 | 84.8 | 87.4 | 87.0 | 89.4 | 92.9 | 96.1 | 104.0 | 108.8 | 102.3 | 93.2 | 141.3 |
| 1000 | 82.9 | 83.1 | 84.4 | 86.0 | 89.3 | 88.1 | 90.5 | 94.0 | 97.5 | 104.5 | 108.4 | 101.1 | 93.3 | 141.3 |
| 1250 | 82.7 | 84.5 | 85.3 | 87.1 | 90.1 | 89.8 | 91.4 | 94.6 | 98.0 | 103.1 | 108.3 | 98.9 | 92.6 | 140.8 |
| 1600 | 84.6 | 85.4 | 88.2 | 88.4 | 90.0 | 90.1 | 91.8 | 95.0 | 98.1 | 102.5 | 105.7 | 98.7 | 92.2 | 139.5 |
| 2000 | 89.9 | 92.0 | 93.2 | 92.0 | 91.1 | 89.5 | 92.3 | 95.3 | 98.6 | 102.6 | 104.5 | 97.3 | 92.3 | 139.4 |
| 2500 | 97.3 | 96.4 | 95.4 | 92.9 | 91.7 | 90.7 | 92.5 | 95.6 | 97.8 | 102.5 | 101.2 | 94.4 | 90.6 | 138.9 |
| 3150 | 97.3 | 99.1 | 98.9 | 96.4 | 96.5 | 91.7 | 93.2 | 96.7 | 98.5 | 100.5 | 99.2 | 92.6 | 89.1 | 139.8 |
| 4000 | 92.9 | 95.0 | 96.5 | 99.5 | 100.6 | 95.5 | 94.3 | 96.2 | 97.6 | 98.9 | 97.0 | 90.2 | 86.2 | 139.4 |
| 5000 | 91.8 | 92.2 | 92.0 | 93.7 | 97.4 | 97.2 | 96.3 | 96.4 | 97.6 | 99.1 | 96.5 | 89.1 | 85.9 | 138.3 |
| 6300 | 89.2 | 90.1 | 90.9 | 92.4 | 93.8 | 94.4 | 95.9 | 97.4 | 97.5 | 97.8 | 95.1 | 88.3 | 84.8 | 137.4 |
| 8000 | 87.2 | 88.3 | 89.2 | 91.8 | 91.9 | 92.3 | 93.8 | 96.6 | 96.9 | 97.8 | 93.8 | 86.9 | 83.2 | 136.7 |
| 10000 | 85.2 | 86.1 | 87.5 | 88.8 | 90.7 | 91.5 | 92.9 | 96.3 | 95.9 | 96.5 | 92.3 | 86.0 | 82.6 | 136.2 |
| 12500 | 81.4 | 83.2 | 84.4 | 86.6 | 87.0 | 89.7 | 91.0 | 94.1 | 94.1 | 94.1 | 90.0 | 84.0 | 80.9 | 134.8 |
| 16000 | 78.5 | 81.3 | 82.3 | 85.3 | 84.3 | 87.7 | 88.8 | 91.5 | 91.3 | 91.6 | 87.1 | 82.7 | 79.3 | 133.7 |
| 20000 | 77.5 | 78.0 | 81.4 | 80.0 | 83.9 | 85.8 | 87.5 | 87.3 | 87.3 | 87.4 | 83.6 | 79.1 | 75.8 | 131.6 |
| 25000 | 70.2 | 73.6 | 74.6 | 77.2 | 78.1 | 80.9 | 81.6 | 82.2 | 84.1 | 83.1 | 78.9 | 75.0 | 73.5 | 130.0 |
| 31500 | 66.6 | 68.6 | 71.1 | 74.9 | 75.2 | 76.4 | 77.5 | 79.2 | 79.4 | 80.6 | 76.5 | 70.7 | 68.2 | 129.6 |
| 40000 | 61.3 | 63.7 | 64.9 | 69.3 | 66.8 | 71.6 | 72.4 | 73.9 | 73.9 | 74.1 | 71.1 | 64.8 | 62.1 | 127.9 |
| 50000 | 53.5 | 56.3 | 58.5 | 61.9 | 59.8 | 63.8 | 66.0 | 68.8 | 68.8 | 65.8 | 63.7 | 58.5 | 56.0 | 125.4 |
| 63000 | 48.3 | 51.2 | 52.1 | 54.7 | 54.3 | 57.0 | 60.5 | 58.3 | 63.0 | 57.6 | 57.1 | 52.9 | 49.0 | 124.3 |
| 80000 | 43.7 | 48.3 | 49.0 | 50.9 | 49.1 | 50.5 | 52.5 | 52.0 | 54.7 | 51.3 | 50.8 | 44.0 | 40.0 | 124.4 |
| QASPL | 102.7 | 103.6 | 103.9 | 104.9 | 105.4 | 103.9 | 104.8 | 107.2 | 109.0 | 113.6 | 116.6 | 112.3 | 108.5 | 151.7 |

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TEST DATE 12-15-77 TAPE NO. N281 ALPHA SB59 TAMB 35.96
LOCATION C41 ANECH CH AERO. RDG. ADH018 PAMB 29.4533 RELHUM 78.90

MODEL TEST POINT 0509 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.38 SQ IN) - MJUEL 112.78 M/SEC (370.0 FPS) FREQ-JET SPEED

07/19/79 17.761

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS

33.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FM0DL X05090

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ
50

63

80

100

125

160

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|
| 250 | 81.4 | 82.7 | 81.2 | 81.2 | 79.9 | 81.1 | 81.6 | 82.0 | 85.5 | 91.4 | 96.0 | 98.9 | 99.7 | 132.7 |
| 315 | 81.4 | 82.7 | 81.2 | 81.2 | 82.8 | 82.8 | 83.0 | 82.8 | 88.2 | 98.4 | 100.4 | 101.6 | 100.3 | 135.6 |
| 400 | 82.2 | 83.4 | 82.0 | 82.4 | 84.4 | 83.4 | 84.3 | 86.0 | 90.0 | 99.3 | 103.8 | 103.4 | 99.9 | 137.8 |
| 500 | 84.2 | 83.8 | 83.7 | 83.6 | 86.4 | 85.4 | 85.4 | 86.8 | 92.1 | 101.1 | 105.5 | 103.9 | 99.5 | 133.1 |
| 630 | 86.1 | 85.7 | 84.4 | 85.6 | 88.2 | 86.1 | 87.5 | 88.5 | 94.4 | 101.9 | 107.1 | 103.2 | 99.9 | 140.1 |
| 800 | 91.3 | 85.4 | 85.4 | 85.8 | 89.3 | 87.5 | 88.5 | 90.8 | 96.3 | 103.2 | 107.7 | 103.5 | 102.6 | 141.0 |
| 1000 | 89.1 | 86.4 | 87.5 | 88.1 | 91.2 | 88.7 | 89.8 | 92.1 | 96.9 | 101.8 | 107.6 | 101.4 | 102.0 | 140.5 |
| 1250 | 89.9 | 89.1 | 89.3 | 92.2 | 90.4 | 90.8 | 92.8 | 97.4 | 101.7 | 105.6 | 101.8 | 102.2 | 139.9 | |
| 1600 | 89.8 | 90.5 | 90.5 | 90.5 | 92.2 | 91.0 | 91.4 | 93.5 | 96.3 | 102.1 | 104.8 | 100.7 | 102.6 | 139.8 |
| 2000 | 91.6 | 91.4 | 93.0 | 92.0 | 93.0 | 91.6 | 92.2 | 94.1 | 97.7 | 102.2 | 101.6 | 98.1 | 101.3 | 138.8 |
| 2500 | 94.7 | 96.1 | 96.6 | 94.6 | 93.9 | 92.0 | 92.6 | 94.7 | 99.1 | 100.9 | 100.3 | 97.0 | 100.5 | 139.1 |
| 3150 | 103.9 | 101.9 | 99.8 | 96.1 | 99.5 | 93.4 | 94.1 | 96.3 | 99.1 | 100.1 | 99.0 | 95.5 | 98.6 | 141.3 |
| 4000 | 106.4 | 106.8 | 105.0 | 103.9 | 104.2 | 97.7 | 95.9 | 96.8 | 99.9 | 101.1 | 99.1 | 95.1 | 99.1 | 144.9 |
| 5000 | 101.0 | 102.2 | 102.6 | 104.3 | 101.1 | 100.0 | 98.5 | 97.8 | 99.7 | 99.6 | 97.5 | 94.1 | 97.8 | 143.2 |
| 6300 | 98.6 | 98.3 | 97.3 | 98.1 | 97.7 | 97.4 | 98.2 | 98.6 | 98.3 | 98.8 | 95.0 | 90.9 | 93.6 | 140.4 |
| 8000 | 95.9 | 96.2 | 96.2 | 96.8 | 95.8 | 95.3 | 95.7 | 97.3 | 97.8 | 98.0 | 94.2 | 90.9 | 94.4 | 139.3 |
| 10000 | 93.7 | 94.2 | 94.3 | 96.1 | 94.6 | 94.5 | 95.0 | 97.1 | 96.6 | 96.2 | 92.7 | 89.7 | 93.9 | 138.7 |
| 12500 | 91.4 | 91.7 | 92.4 | 92.8 | 91.4 | 92.7 | 93.1 | 95.2 | 95.1 | 95.1 | 91.3 | 90.2 | 94.0 | 137.6 |
| 16000 | 89.6 | 90.4 | 90.3 | 91.1 | 88.7 | 90.7 | 91.2 | 93.1 | 91.6 | 91.6 | 88.5 | 87.3 | 90.9 | 136.6 |
| 20000 | 86.3 | 88.0 | 87.8 | 89.4 | 84.5 | 86.9 | 88.2 | 89.2 | 89.6 | 88.5 | 84.9 | 84.0 | 89.0 | 135.4 |
| 25000 | 81.0 | 83.6 | 82.9 | 84.9 | 82.5 | 83.9 | 84.1 | 84.2 | 84.7 | 85.8 | 82.4 | 79.8 | 84.3 | 133.7 |
| 31500 | 76.7 | 79.0 | 78.7 | 79.9 | 79.6 | 79.4 | 79.9 | 80.6 | 80.4 | 80.4 | 78.2 | 75.1 | 79.6 | 132.5 |
| 40000 | 72.2 | 73.1 | 74.3 | 76.8 | 71.2 | 74.6 | 74.9 | 75.5 | 75.9 | 72.9 | 71.4 | 69.5 | 73.9 | 131.3 |
| 50000 | 66.5 | 67.8 | 67.8 | 70.8 | 64.2 | 66.8 | 68.8 | 67.7 | 71.1 | 65.6 | 65.9 | 64.9 | 68.0 | 129.5 |
| 63000 | 57.8 | 59.5 | 60.4 | 62.4 | 58.2 | 60.0 | 63.0 | 60.1 | 63.5 | 59.9 | 59.9 | 56.4 | 59.7 | 127.5 |
| 80000 | 48.5 | 50.9 | 51.0 | 52.7 | 53.0 | 53.5 | 54.8 | 53.2 | 53.7 | 50.0 | 50.1 | 46.6 | 49.9 | 125.9 |

GASPL 110.3 110.3 109.3 109.2 108.7 106.2 106.1 107.3 109.7 112.9 115.6 112.5 112.5 153.0

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 370.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 12-15-77 TAPE NO. N281 ALPHA SB59 TAMB 35.98
LOCATION C41 ANECH CH AERO. RDG. ADH018 PAMB 29.4533 RELHUM 78.90

MODEL TEST POINT 0500 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.36 SQ IN) - MODEL 112.76 M/SEC (370.0 FPS) FREE-JET SPEED

ORIGINAL PAGE IS
OF POOR QUALITY

07/19/79 17.781

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F. 70 PERCENT R.H. STD. DAY SB 2400.0 FT. SL

382

IDENTIFICATION - FJ-400-FMODL X05095

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 61.1 | 63.9 | 65.5 | 64.7 | 67.1 | 66.2 | 66.9 | 68.2 | 71.6 | 79.7 | 82.7 | 80.1 | 73.3 | 156.2 |
| 63 | 63.0 | 64.3 | 65.2 | 65.8 | 69.1 | 68.1 | 68.0 | 69.0 | 73.7 | 81.5 | 84.4 | 80.6 | 72.8 | 157.4 |
| 80 | 64.9 | 66.1 | 65.9 | 67.8 | 70.8 | 63.8 | 70.1 | 70.7 | 75.9 | 82.3 | 86.0 | 79.8 | 73.1 | 158.4 |
| 100 | 70.1 | 65.7 | 66.8 | 67.9 | 71.8 | 70.2 | 71.1 | 72.9 | 77.7 | 83.5 | 86.4 | 80.1 | 75.7 | 159.4 |
| 125 | 67.7 | 66.7 | 68.8 | 70.2 | 73.7 | 71.3 | 72.3 | 74.1 | 78.2 | 82.1 | 86.2 | 77.8 | 74.9 | 158.9 |
| 160 | 68.4 | 69.2 | 70.3 | 71.2 | 74.6 | 73.0 | 73.1 | 74.7 | 78.6 | 81.8 | 84.1 | 77.9 | 74.7 | 158.2 |
| 200 | 68.0 | 70.3 | 71.0 | 72.3 | 74.5 | 73.4 | 73.6 | 75.3 | 79.3 | 82.0 | 83.0 | 76.5 | 74.6 | 158.1 |
| 250 | 69.5 | 71.0 | 73.8 | 73.5 | 75.0 | 73.8 | 74.2 | 75.6 | 78.5 | 81.8 | 79.5 | 73.5 | 72.6 | 157.2 |
| 315 | 72.1 | 75.3 | 77.1 | 75.9 | 75.6 | 73.9 | 74.4 | 76.0 | 79.5 | 80.1 | 77.7 | 71.8 | 71.0 | 157.4 |
| 400 | 80.9 | 80.8 | 79.9 | 77.1 | 80.9 | 75.0 | 75.5 | 77.3 | 79.2 | 79.0 | 76.0 | 69.7 | 68.2 | 159.6 |
| 500 | 82.9 | 85.3 | 84.8 | 84.5 | 85.3 | 79.1 | 77.1 | 77.5 | 79.7 | 79.6 | 75.6 | 68.6 | 67.7 | 163.2 |
| 630 | 77.0 | 80.3 | 82.1 | 84.7 | 82.0 | 81.0 | 79.4 | 78.2 | 79.2 | 77.7 | 73.5 | 66.9 | 65.3 | 161.5 |
| 800 | 74.1 | 76.0 | 76.5 | 78.2 | 78.3 | 78.2 | 78.8 | 78.7 | 77.5 | 76.5 | 70.5 | 63.0 | 59.9 | 158.8 |
| 1000 | 71.0 | 73.6 | 75.1 | 76.7 | 76.3 | 76.0 | 76.2 | 77.2 | 76.8 | 75.4 | 69.2 | 62.3 | 59.6 | 157.7 |
| 1250 | 68.3 | 71.3 | 73.0 | 75.8 | 75.0 | 75.1 | 75.3 | 76.9 | 75.3 | 73.3 | 67.2 | 60.4 | 57.6 | 157.1 |
| 1600 | 65.1 | 68.2 | 70.7 | 72.2 | 71.5 | 73.0 | 73.2 | 74.6 | 73.3 | 71.6 | 65.0 | 59.5 | 55.4 | 156.0 |
| 2000 | 62.4 | 66.2 | 68.2 | 70.3 | 68.7 | 70.8 | 71.1 | 72.3 | 69.5 | 67.4 | 61.2 | 54.9 | 49.3 | 155.0 |
| 2500 | 57.2 | 62.7 | 64.9 | 67.9 | 63.8 | 66.5 | 67.6 | 67.7 | 66.6 | 63.2 | 55.8 | 48.8 | 42.5 | 153.8 |
| 3150 | 48.6 | 55.8 | 58.0 | 61.9 | 60.5 | 62.2 | 62.1 | 61.2 | 59.9 | 58.0 | 50.0 | 39.7 | 29.4 | 152.1 |
| 4000 | 38.0 | 46.4 | 50.0 | 53.6 | 54.6 | 54.8 | 54.9 | 54.3 | 51.7 | 47.9 | 39.5 | 26.1 | 10.2 | 150.9 |
| 5000 | 23.7 | 33.0 | 39.4 | 45.1 | 41.2 | 45.2 | 44.8 | 43.8 | 41.0 | 32.8 | 23.0 | 6.7 | | 149.7 |
| 6300 | 0.3 | 13.5 | 20.8 | 28.3 | 24.2 | 27.5 | 28.7 | 25.2 | 24.2 | 11.3 | | | | 147.9 |
| 8000 | | | | 0.7 | 0.0 | 2.9 | 4.6 | | | | | | | 145.9 |
| 10000 | | | | | | | | | | | | | | 144.3 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| OASPL | 86.8 | 88.7 | 89.0 | 89.7 | 89.9 | 87.4 | 87.1 | 87.9 | 89.8 | 92.3 | 93.9 | 88.1 | 85.7 | 171.3 |
| PNL | 92.5 | 95.0 | 95.6 | 96.3 | 96.7 | 94.5 | 94.0 | 94.9 | 95.3 | 95.9 | 94.7 | 88.0 | 84.9 | |
| PNLT | 95.0 | 96.6 | 96.8 | 98.7 | 98.0 | 94.5 | 94.0 | 94.9 | 95.3 | 95.9 | 94.7 | 88.0 | 84.9 | |

DIAMETER RATIO 0.288 FREQUENCY SHIFT -9

TEST DATE 12-15-77 TAPE NO. N281 IALPHA SB59 TAMB 36.96
LOCATION C41 ANECH CH AERG. RDG. ADH018 PAMB 29.4533 RELHUM 78.90

MODEL TEST POINT 0509 ACQUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 112.78 M/SEC (370.0 FPS)
FREE-JET SPEED

07/19/79 17.781

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG F 70 PERCENT R.H. STD. DAY, SA 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X05100
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PUL

REQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2300

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

10000000

12500000

16000000

20000000

25000000

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OF POOR QUALITY

TEST DATE 12-15-77 TAPE NO. N281 IALPHA SB59 TAMB 40.46
LOCATION C41 ANECH CH AERO. RDG. ADH007 PAMB 29.4620 RELHUM 72.90

MODEL TEST POINT 0510 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.36 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

383

07/19/79 17.761

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X05100

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1500

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

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OASPL 117.6 117.7 118.3 119.0 121.4 119.5 120.5 123.1 126.1 132.4 132.9 128.4 127.0 168.8

MODEL/ENL SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES

INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 12-15-77

TAPE NO. N281

ALPHA SB59

TANB 40.46

LOCATION C41 ANECH CH

AERO. RDG. ADH007

PAMB 29.4620

RELHUM 72.90

MODEL TEST POINT

0500 0510

SIZE

12.2 M (40.0 FT) ARC 131.5 SQ CM (20.38 SQ IN) - MODEL

FREE-JET SPEED

0. M/SEC (0. FPS)

07/19/79 17.761

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X05105

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|------|------|-------|
| 50 | 68.3 | 72.1 | 73.7 | 76.0 | 78.5 | 79.2 | 81.2 | 83.5 | 88.0 | 95.2 | 97.1 | 94.1 | 89.9 | 170.9 |
| 60 | 70.4 | 74.0 | 74.5 | 77.5 | 80.3 | 81.3 | 82.3 | 84.8 | 90.0 | 98.3 | 99.4 | 93.6 | 89.2 | 172.6 |
| 80 | 72.7 | 75.3 | 77.1 | 78.9 | 82.4 | 81.9 | 84.4 | 86.6 | 92.4 | 100.3 | 99.7 | 94.6 | 90.4 | 173.6 |
| 100 | 75.4 | 75.5 | 78.3 | 81.1 | 83.8 | 83.8 | 86.3 | 89.6 | 95.1 | 101.8 | 100.9 | 94.8 | 89.3 | 175.0 |
| 125 | 78.3 | 80.7 | 82.6 | 83.3 | 85.8 | 84.8 | 87.6 | 90.8 | 96.3 | 102.3 | 100.6 | 95.0 | 89.6 | 175.4 |
| 160 | 88.7 | 91.1 | 92.5 | 87.3 | 91.3 | 88.1 | 90.8 | 92.8 | 96.9 | 103.5 | 105.7 | 97.3 | 92.3 | 178.8 |
| 200 | 88.6 | 87.5 | 89.2 | 86.2 | 88.3 | 87.0 | 89.3 | 92.7 | 96.9 | 101.9 | 102.2 | 94.0 | 89.0 | 176.5 |
| 250 | 88.1 | 90.3 | 90.5 | 90.8 | 89.9 | 87.5 | 89.1 | 92.1 | 96.9 | 101.4 | 98.7 | 89.9 | 84.4 | 175.3 |
| 315 | 85.8 | 86.6 | 90.4 | 94.2 | 97.7 | 91.3 | 90.2 | 92.7 | 95.8 | 101.7 | 97.6 | 89.0 | 81.9 | 175.9 |
| 400 | 84.0 | 86.0 | 87.5 | 90.9 | 95.9 | 93.3 | 91.7 | 93.4 | 95.4 | 99.3 | 95.7 | 97.1 | 78.7 | 174.8 |
| 500 | 81.9 | 84.7 | 87.0 | 88.9 | 90.7 | 92.1 | 93.0 | 93.4 | 94.4 | 97.3 | 93.8 | 85.0 | 76.0 | 173.6 |
| 630 | 80.3 | 83.0 | 85.4 | 88.3 | 91.2 | 89.8 | 92.1 | 93.3 | 94.1 | 97.4 | 93.0 | 82.7 | 74.1 | 173.6 |
| 800 | 78.4 | 82.0 | 84.0 | 87.0 | 90.2 | 90.4 | 90.6 | 93.5 | 92.9 | 95.9 | 90.8 | 80.5 | 71.9 | 172.9 |
| 1000 | 76.5 | 80.7 | 83.9 | 87.0 | 88.2 | 88.9 | 89.8 | 92.8 | 92.0 | 94.9 | 89.6 | 78.4 | 68.9 | 172.6 |
| 1250 | 74.2 | 78.7 | 82.2 | 85.3 | 87.3 | 88.1 | 89.5 | 91.8 | 90.6 | 93.6 | 87.6 | 76.2 | 66.7 | 172.1 |
| 1600 | 71.1 | 76.0 | 79.4 | 82.9 | 84.3 | 86.3 | 87.1 | 89.4 | 88.4 | 90.8 | 84.5 | 72.8 | 62.1 | 170.8 |
| 2000 | 67.8 | 74.8 | 77.6 | 81.4 | 81.9 | 84.0 | 85.4 | 87.6 | 85.9 | 88.6 | 82.0 | 69.2 | 56.1 | 170.5 |
| 2500 | 61.9 | 70.8 | 72.8 | 78.2 | 77.7 | 80.5 | 81.7 | 82.8 | 81.8 | 82.8 | 73.3 | 63.0 | 48.8 | 168.1 |
| 3150 | 55.7 | 64.0 | 68.2 | 72.6 | 74.5 | 76.9 | 77.3 | 77.1 | 77.9 | 77.3 | 66.9 | 54.3 | 36.5 | 167.5 |
| 4000 | 46.4 | 55.4 | 61.5 | 67.9 | 69.2 | 69.9 | 70.6 | 71.4 | 70.8 | 72.5 | 60.0 | 41.9 | 17.0 | 168.9 |
| 5000 | 32.7 | 43.3 | 50.3 | 57.5 | 58.5 | 60.3 | 61.1 | 61.6 | 60.5 | 60.9 | 47.0 | 21.7 | | 168.6 |
| 6300 | 7.8 | 22.6 | 32.4 | 40.2 | 40.5 | 44.3 | 45.3 | 44.3 | 44.2 | 40.5 | 23.1 | | | 167.2 |
| 8000 | | | | | | | | | | | | | | 167.4 |
| 10000 | | | | | | | | | | | | | | 169.8 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GASPL 95.2 96.9 98.7 99.9 102.8 100.8 101.7 103.8 106.4 111.8 111.0 104.0 98.8 187.1
 PWL 98.8 101.7 103.7 106.6 109.2 107.9 108.6 110.8 111.8 116.2 113.9 105.3 99.0
 PWLT 100.0 103.0 104.8 107.4 110.1 107.9 108.6 110.8 111.8 116.7 115.1 105.3 100.0

DIAMETER RATIO 8.288 FREQUENCY SHIFT -9

TEST DATE 12-15-77 TAPE NO. N281 ALPHA 8859 TAPB 40.46
 LOCATION C41 ANECH CH AERO. RDG. ADH007 PAMB 29.4620 RELNUM 72.90

MODEL TEST POINT 0510 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 0. FREE-JET SPEED M/SEC (0. FPS)

07/19/79 17.781

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F. 70 PERCENT R.H. STD. DAY. SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X05110
BACKGROUND FJB300-FMODL X05230

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 84.3 | 88.1 | 87.6 | 89.6 | 90.0 | 91.8 | 94.5 | 96.4 | 99.6 | 105.9 | 110.3 | 112.2 | 116.9 | 147.6 |
| 315 | 86.1 | 88.4 | 88.2 | 90.2 | 92.6 | 93.2 | 95.6 | 97.0 | 101.2 | 106.0 | 112.9 | 113.8 | 117.5 | 149.0 |
| 400 | 88.1 | 89.2 | 90.2 | 92.0 | 94.1 | 94.4 | 96.8 | 99.5 | 103.5 | 112.5 | 116.2 | 115.6 | 116.5 | 150.9 |
| 500 | 90.2 | 91.3 | 91.3 | 93.3 | 96.4 | 97.3 | 98.4 | 101.3 | 106.8 | 115.8 | 118.3 | 115.2 | 114.1 | 152.3 |
| 630 | 92.7 | 91.9 | 93.6 | 94.9 | 98.0 | 97.6 | 100.3 | 103.2 | 109.1 | 118.2 | 120.1 | 115.5 | 112.7 | 153.8 |
| 800 | 93.8 | 92.4 | 94.6 | 96.4 | 99.3 | 98.6 | 101.8 | 105.9 | 111.9 | 120.2 | 120.8 | 114.3 | 110.4 | 154.9 |
| 1000 | 96.9 | 96.5 | 100.2 | 99.0 | 101.6 | 100.7 | 103.6 | 107.3 | 113.7 | 120.5 | 121.9 | 114.6 | 109.5 | 155.7 |
| 1250 | 105.0 | 102.1 | 107.3 | 105.4 | 106.2 | 104.3 | 104.7 | 109.1 | 114.7 | 122.4 | 129.0 | 119.4 | 114.9 | 160.8 |
| 1600 | 108.1 | 104.9 | 104.7 | 102.5 | 103.1 | 102.9 | 105.3 | 109.7 | 114.6 | 120.5 | 121.2 | 113.2 | 109.5 | 155.8 |
| 2000 | 104.7 | 107.5 | 108.7 | 109.5 | 103.4 | 103.6 | 105.6 | 108.3 | 114.6 | 121.3 | 120.5 | 111.8 | 109.5 | 156.1 |
| 2500 | 103.6 | 104.4 | 109.1 | 114.7 | 116.5 | 108.0 | 107.0 | 110.2 | 114.3 | 121.2 | 119.7 | 110.6 | 108.6 | 156.8 |
| 3150 | 103.8 | 104.9 | 104.7 | 104.7 | 110.3 | 110.0 | 109.5 | 110.9 | 114.3 | 120.0 | 118.7 | 109.4 | 107.7 | 155.2 |
| 4000 | 101.9 | 104.2 | 105.8 | 105.3 | 106.3 | 107.1 | 110.8 | 111.3 | 113.9 | 118.1 | 116.3 | 108.2 | 106.2 | 153.9 |
| 5000 | 102.1 | 103.2 | 103.7 | 105.5 | 107.9 | 105.5 | 109.3 | 111.2 | 114.1 | 118.4 | 116.2 | 106.7 | 104.9 | 154.0 |
| 6300 | 100.7 | 101.6 | 102.9 | 104.6 | 106.8 | 106.2 | 108.4 | 112.1 | 113.1 | 117.0 | 114.8 | 105.4 | 104.6 | 153.3 |
| 8000 | 99.2 | 101.6 | 102.5 | 104.3 | 105.0 | 105.6 | 107.6 | 111.2 | 112.9 | 116.6 | 113.0 | 104.2 | 102.9 | 152.9 |
| 10000 | 98.0 | 99.6 | 101.1 | 102.8 | 104.5 | 104.6 | 107.7 | 110.8 | 110.7 | 115.8 | 111.6 | 102.8 | 101.9 | 152.4 |
| 12500 | 95.2 | 97.5 | 98.4 | 101.2 | 101.0 | 103.2 | 105.5 | 109.2 | 109.4 | 113.4 | 109.3 | 101.2 | 98.7 | 151.2 |
| 16000 | 93.5 | 96.1 | 97.6 | 99.3 | 99.1 | 102.0 | 103.9 | 107.1 | 107.6 | 111.6 | 107.4 | 98.7 | 97.1 | 150.7 |
| 20000 | 89.3 | 93.3 | 94.0 | 96.7 | 95.6 | 97.7 | 100.6 | 102.8 | 104.1 | 107.5 | 102.9 | 95.2 | 93.6 | 148.5 |
| 25000 | 86.3 | 89.4 | 90.9 | 93.8 | 93.7 | 95.2 | 97.4 | 98.6 | 101.9 | 104.4 | 98.7 | 90.6 | 91.3 | 147.8 |
| 31500 | 83.1 | 85.2 | 87.9 | 91.2 | 90.7 | 91.7 | 93.1 | 95.7 | 98.2 | 103.7 | 97.7 | 86.5 | 86.5 | 148.8 |
| 40000 | 78.1 | 80.2 | 82.2 | 86.1 | 83.9 | 86.7 | 88.3 | 91.2 | 93.7 | 98.2 | 93.0 | 80.9 | 80.5 | 147.7 |
| 50000 | 70.4 | 72.9 | 74.8 | 79.0 | 77.1 | 79.6 | 82.9 | 84.3 | 89.1 | 90.9 | 87.5 | 75.6 | 74.1 | 145.8 |
| 63000 | 64.6 | 66.6 | 68.2 | 72.5 | 71.6 | 73.3 | 76.9 | 77.9 | 85.4 | 85.5 | 82.0 | 69.7 | 67.2 | 146.0 |
| 80000 | 58.8 | 61.6 | 62.9 | 68.7 | 66.2 | 67.6 | 69.2 | 73.6 | 78.8 | 80.9 | 76.4 | 60.6 | 58.1 | 147.6 |
| GASPL | 114.0 | 114.3 | 116.2 | 118.2 | 119.8 | 117.1 | 118.9 | 121.7 | 125.0 | 131.2 | 132.8 | 125.7 | 124.6 | 167.7 |

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TEST DATE 12-15-77 TAPE NO. N281 ALPHA SB59 TAMB 37.04
LOCATION C41 ANECH CH AERO. RDG. ADH012 PAMB 29.4533 RELHUM 75.70

MODEL TEST POINT 0511 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.38 SQ IN) - MODEL 84.73 M/SEC (278.0 FPS) FREE-JET SPEED

07/19/79 17.781

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X05110

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 89.5 | 92.3 | 90.8 | 91.8 | 91.0 | 91.8 | 93.1 | 93.8 | 98.6 | 104.8 | 109.3 | 110.5 | 115.4 | 148.2 |
| 315 | 89.5 | 92.3 | 90.8 | 91.8 | 91.0 | 91.8 | 93.1 | 93.8 | 98.6 | 104.8 | 109.3 | 110.5 | 115.4 | 148.2 |
| 400 | 91.3 | 92.7 | 91.5 | 94.3 | 95.3 | 94.6 | 95.9 | 97.5 | 105.5 | 114.2 | 116.9 | 114.6 | 115.9 | 151.2 |
| 500 | 93.3 | 93.5 | 93.6 | 95.7 | 97.7 | 97.4 | 97.8 | 100.0 | 107.6 | 116.4 | 118.4 | 115.3 | 115.8 | 152.6 |
| 630 | 95.4 | 95.6 | 94.7 | 97.3 | 99.3 | 97.8 | 99.5 | 101.5 | 110.4 | 118.4 | 119.2 | 114.5 | 115.1 | 153.6 |
| 800 | 97.9 | 96.2 | 97.0 | 98.8 | 100.6 | 98.9 | 101.0 | 104.2 | 112.5 | 119.0 | 120.8 | 115.8 | 115.9 | 154.4 |
| 1000 | 99.0 | 96.7 | 98.1 | 101.4 | 103.0 | 101.0 | 102.9 | 105.6 | 113.7 | 121.1 | 128.1 | 120.9 | 121.5 | 160.2 |
| 1250 | 102.0 | 100.8 | 103.6 | 107.1 | 107.3 | 104.7 | 104.1 | 107.5 | 113.6 | 119.2 | 120.3 | 114.5 | 115.0 | 153.1 |
| 1600 | 108.4 | 105.0 | 109.7 | 104.6 | 104.3 | 103.4 | 104.8 | 108.2 | 113.7 | 120.1 | 119.6 | 113.1 | 116.0 | 155.3 |
| 2000 | 113.0 | 109.0 | 107.8 | 111.8 | 109.2 | 104.2 | 105.2 | 107.9 | 113.5 | 120.1 | 118.8 | 112.0 | 115.2 | 155.6 |
| 2500 | 108.3 | 110.7 | 111.4 | 118.2 | 118.6 | 108.7 | 106.7 | 108.9 | 113.8 | 119.2 | 118.1 | 111.0 | 114.3 | 157.1 |
| 3150 | 110.5 | 110.3 | 113.9 | 107.5 | 112.2 | 111.0 | 109.4 | 109.9 | 113.7 | 117.7 | 116.1 | 110.3 | 113.4 | 155.0 |
| 4000 | 108.9 | 109.3 | 108.3 | 108.3 | 108.5 | 108.3 | 111.1 | 110.5 | 114.3 | 118.3 | 116.4 | 109.0 | 112.1 | 154.6 |
| 5000 | 106.9 | 108.7 | 109.4 | 108.6 | 110.3 | 107.0 | 109.8 | 110.8 | 113.8 | 117.5 | 115.6 | 108.3 | 112.4 | 154.3 |
| 6300 | 107.0 | 107.6 | 107.4 | 108.1 | 109.5 | 108.1 | 109.4 | 112.2 | 114.4 | 117.8 | 114.5 | 107.7 | 111.2 | 154.5 |
| 8000 | 105.5 | 106.0 | 106.6 | 108.1 | 108.1 | 108.0 | 109.2 | 111.8 | 112.6 | 117.3 | 113.2 | 106.5 | 110.4 | 154.0 |
| 10000 | 103.9 | 105.9 | 106.2 | 106.9 | 108.0 | 107.6 | 109.8 | 111.8 | 111.6 | 115.1 | 111.3 | 105.2 | 107.5 | 153.5 |
| 12500 | 102.3 | 103.7 | 104.8 | 105.2 | 104.5 | 105.6 | 107.2 | 107.8 | 110.2 | 110.4 | 114.0 | 109.9 | 103.3 | 152.7 |
| 16000 | 99.0 | 101.1 | 101.6 | 104.1 | 103.0 | 105.0 | 106.0 | 108.1 | 107.2 | 110.2 | 105.9 | 100.1 | 103.3 | 151.4 |
| 20000 | 98.8 | 100.7 | 101.6 | 100.8 | 99.2 | 100.7 | 102.7 | 103.9 | 105.7 | 107.8 | 102.2 | 96.1 | 102.2 | 150.4 |
| 25000 | 92.1 | 95.8 | 96.2 | 98.6 | 97.6 | 98.2 | 99.5 | 99.6 | 102.6 | 107.8 | 101.9 | 92.8 | 97.6 | 150.6 |
| 31500 | 90.2 | 92.7 | 93.5 | 96.1 | 94.7 | 94.7 | 95.1 | 96.7 | 99.0 | 103.1 | 98.1 | 88.0 | 92.4 | 149.9 |
| 40000 | 86.2 | 87.6 | 89.6 | 91.0 | 87.8 | 89.7 | 90.3 | 92.2 | 94.9 | 96.3 | 93.0 | 83.1 | 86.4 | 148.5 |
| 50000 | 80.8 | 82.3 | 83.5 | 83.3 | 81.1 | 82.6 | 85.0 | 85.3 | 92.1 | 91.7 | 88.4 | 78.2 | 80.5 | 148.0 |
| 63000 | 72.1 | 74.0 | 75.2 | 77.4 | 75.6 | 76.3 | 79.0 | 79.0 | 87.9 | 88.7 | 84.3 | 70.5 | 72.9 | 148.8 |
| 80000 | 64.8 | 66.2 | 67.1 | 73.6 | 70.1 | 70.6 | 71.2 | 74.6 | 76.1 | 78.9 | 74.5 | 60.7 | 63.1 | 147.1 |
| CASPL | 118.8 | 118.5 | 119.8 | 121.4 | 122.0 | 118.5 | 119.5 | 121.4 | 125.0 | 130.5 | 131.9 | 126.0 | 127.7 | 167.8 |

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OF POOR QUALITY

| MODEL/FEHL | SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 278.00 | REFRACTION CORRECTION - YES |
|-------------|-------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 | CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 12-15-77 | TAPE NO. | N281 | ALPHA | SB59 | TAMB | 37.04 | |
|-----------|--------------|----------|------|--------|------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERG. | RDG. | ADH012 | PAMB | 24.4533 | RELHUM | 73.70 |

| MODEL | TEST POINT | ACQUSTIC RANGE | SIZE | FREE-JET SPEED |
|-------|------------|-------------------|--|--------------------------|
| 0500 | 0511 | 12.2 M (40.0 FT) | ARC 131.5 SQ CH (20.38 SQ IN) - MODEL | 84.73 M/SEC (278.0 FPS) |

07/19/79 17.781

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F. 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X05115

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|-------|------|------|------|------|-------|-------|------|------|-------|
| 50 | 70.2 | 73.2 | 73.1 | 76.6 | 78.0 | 77.4 | 78.5 | 78.7 | 87.0 | 94.7 | 95.8 | 91.3 | 89.3 | 169.8 |
| 63 | 72.2 | 74.0 | 75.1 | 77.9 | 80.3 | 80.2 | 80.4 | 82.2 | 89.1 | 96.8 | 97.3 | 92.0 | 89.1 | 171.0 |
| 80 | 74.2 | 76.0 | 76.1 | 79.5 | 81.9 | 80.6 | 82.1 | 83.7 | 91.9 | 98.8 | 98.1 | 91.2 | 88.3 | 172.0 |
| 100 | 76.6 | 76.5 | 78.5 | 81.0 | 83.2 | 81.6 | 83.5 | 86.3 | 93.9 | 99.4 | 99.5 | 92.3 | 89.0 | 173.2 |
| 125 | 77.7 | 77.0 | 79.4 | 83.5 | 85.5 | 83.7 | 85.4 | 87.6 | 95.0 | 101.3 | 106.8 | 97.3 | 94.4 | 178.5 |
| 160 | 80.5 | 80.8 | 84.8 | 89.0 | 89.6 | 87.2 | 86.4 | 89.5 | 94.8 | 99.3 | 98.7 | 90.7 | 88.5 | 173.5 |
| 200 | 86.6 | 84.8 | 90.7 | 86.4 | 86.5 | 85.8 | 87.0 | 90.0 | 94.7 | 100.0 | 97.8 | 88.9 | 88.0 | 173.7 |
| 250 | 90.9 | 88.6 | 88.6 | 93.2 | 91.7 | 86.4 | 87.2 | 89.4 | 94.3 | 99.7 | 96.7 | 87.4 | 86.4 | 173.9 |
| 315 | 85.8 | 90.0 | 91.9 | 99.4 | 100.4 | 90.6 | 88.5 | 90.2 | 94.3 | 98.4 | 95.6 | 85.8 | 84.8 | 175.5 |
| 400 | 87.5 | 89.1 | 94.0 | 88.5 | 93.6 | 92.5 | 90.9 | 90.9 | 93.9 | 96.5 | 93.1 | 84.5 | 82.9 | 173.4 |
| 500 | 85.4 | 87.8 | 88.1 | 88.9 | 89.6 | 89.6 | 92.2 | 91.2 | 94.1 | 96.7 | 92.9 | 82.5 | 80.7 | 173.0 |
| 630 | 82.9 | 86.7 | 88.9 | 89.0 | 91.1 | 88.1 | 90.7 | 91.2 | 93.3 | 95.6 | 91.6 | 81.2 | 79.9 | 172.7 |
| 800 | 82.5 | 85.3 | 86.6 | 88.2 | 90.1 | 88.9 | 90.1 | 92.3 | 93.6 | 95.5 | 90.0 | 79.8 | 77.6 | 172.9 |
| 1000 | 80.6 | 83.4 | 85.6 | 88.0 | 88.6 | 88.7 | 89.7 | 91.8 | 91.5 | 94.7 | 88.3 | 78.0 | 75.6 | 172.4 |
| 1250 | 78.4 | 82.9 | 85.0 | 86.7 | 88.4 | 88.1 | 90.1 | 91.5 | 90.3 | 92.2 | 85.9 | 75.9 | 71.2 | 171.8 |
| 1600 | 76.0 | 80.2 | 83.0 | 84.7 | 84.6 | 86.5 | 87.7 | 89.6 | 88.6 | 90.4 | 83.6 | 72.6 | 67.9 | 171.1 |
| 2000 | 71.7 | 76.9 | 79.5 | 83.3 | 83.0 | 85.1 | 85.9 | 87.3 | 85.1 | 86.1 | 87.8 | 67.8 | 61.7 | 169.7 |
| 2500 | 69.7 | 75.4 | 78.6 | 79.3 | 78.5 | 80.3 | 82.1 | 82.4 | 82.7 | 82.4 | 73.2 | 61.0 | 55.7 | 168.8 |
| 3150 | 59.7 | 68.0 | 71.3 | 75.6 | 75.6 | 76.5 | 77.5 | 76.6 | 77.8 | 80.0 | 69.5 | 52.7 | 42.7 | 169.0 |
| 4000 | 51.5 | 60.2 | 64.8 | 69.8 | 69.7 | 70.1 | 70.1 | 70.4 | 70.4 | 70.6 | 59.4 | 39.0 | 23.0 | 168.3 |
| 5000 | 37.7 | 47.5 | 54.7 | 59.2 | 57.8 | 60.2 | 60.3 | 60.4 | 60.0 | 56.2 | 44.6 | 20.4 | | 166.9 |
| 6300 | 14.5 | 28.0 | 36.6 | 41.3 | 41.0 | 43.3 | 44.9 | 42.8 | 45.1 | 37.4 | 22.2 | | | 166.4 |
| 8000 | | | | | | | | | | | | | | 167.2 |
| 10000 | | | | | | | | | | | | | | 165.4 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| OASPL | 95.9 | 97.1 | 99.8 | 102.4 | 103.5 | 99.8 | 100.5 | 101.9 | 105.2 | 109.8 | 110.1 | 101.7 | 99.3 | 186.1 |
| PWL | 101.2 | 103.1 | 105.5 | 109.5 | 110.4 | 107.3 | 108.1 | 109.5 | 110.9 | 114.2 | 112.9 | 103.5 | 100.8 | |
| PWL | 102.2 | 103.1 | 107.4 | 111.4 | 111.9 | 107.3 | 108.1 | 109.5 | 111.5 | 114.2 | 114.2 | 104.5 | 101.8 | |

DIAMETER RATIO 8.288 FREQUENCY SHIFT -9

TEST DATE 12-15-77 TAPE NO. N281 IALPHA SB59 TAMB 37.04
LOCATION C41 ANECH CH AERG. RDG. ADH012 PAMB 29.4533 RELHUM 75.70

MODEL TEST POINT 0511 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 84.73 M/SEC (276.0 FPS) FREE-JET SPEED

07/19/79 17.781

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 59 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X05120
BACKGROUND FJB400-FMODL X05220

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 82.9 | 86.5 | 86.3 | 87.8 | 88.3 | 90.5 | 92.9 | 95.1 | 98.6 | 103.4 | 110.3 | 112.7 | 113.1 | 148.3 |
| 315 | 83.8 | 86.4 | 86.4 | 88.4 | 89.5 | 91.4 | 93.3 | 94.9 | 100.2 | 107.2 | 111.6 | 113.6 | 113.2 | 147.2 |
| 400 | 86.1 | 86.9 | 88.2 | 89.7 | 91.8 | 92.7 | 94.8 | 97.2 | 102.2 | 111.8 | 115.7 | 115.1 | 112.0 | 149.7 |
| 500 | 87.6 | 88.7 | 88.9 | 91.0 | 93.9 | 94.5 | 96.1 | 98.8 | 104.5 | 114.1 | 117.7 | 114.9 | 108.8 | 151.0 |
| 630 | 92.0 | 90.1 | 91.4 | 92.9 | 95.7 | 95.1 | 97.5 | 100.9 | 107.1 | 116.9 | 119.3 | 115.0 | 106.7 | 152.7 |
| 800 | 91.3 | 90.1 | 92.4 | 94.2 | 97.0 | 96.9 | 99.3 | 103.2 | 109.9 | 118.7 | 120.1 | 112.8 | 104.7 | 153.6 |
| 1000 | 94.7 | 95.5 | 97.7 | 97.8 | 99.6 | 98.0 | 100.6 | 105.5 | 111.2 | 119.8 | 120.9 | 111.9 | 105.3 | 154.6 |
| 1250 | 100.3 | 101.8 | 101.6 | 100.6 | 102.2 | 101.1 | 102.7 | 106.9 | 112.5 | 119.6 | 121.8 | 111.7 | 105.9 | 155.1 |
| 1600 | 110.4 | 107.4 | 106.4 | 103.7 | 102.1 | 101.4 | 103.8 | 108.0 | 113.6 | 120.8 | 122.5 | 112.5 | 106.7 | 156.2 |
| 2000 | 108.4 | 110.5 | 111.2 | 110.3 | 107.6 | 102.8 | 104.4 | 108.5 | 114.1 | 121.6 | 121.0 | 111.3 | 106.3 | 156.4 |
| 2500 | 105.3 | 106.9 | 109.6 | 111.9 | 113.7 | 107.5 | 106.5 | 108.9 | 114.0 | 121.0 | 119.2 | 110.4 | 105.6 | 156.0 |
| 3150 | 105.1 | 105.4 | 105.9 | 108.9 | 113.3 | 112.2 | 109.5 | 110.4 | 114.1 | 119.3 | 117.7 | 109.4 | 104.4 | 155.2 |
| 4000 | 103.9 | 105.2 | 105.5 | 106.3 | 107.8 | 110.1 | 112.1 | 111.0 | 114.2 | 117.6 | 116.8 | 108.2 | 102.5 | 154.2 |
| 5000 | 102.8 | 103.7 | 105.0 | 106.5 | 108.4 | 107.5 | 110.8 | 112.0 | 113.9 | 117.9 | 115.5 | 107.4 | 101.9 | 153.9 |
| 6300 | 101.7 | 103.4 | 103.9 | 105.9 | 108.0 | 107.9 | 109.4 | 112.9 | 113.6 | 116.5 | 114.3 | 105.4 | 101.3 | 153.5 |
| 8000 | 100.2 | 102.3 | 103.2 | 105.8 | 106.2 | 106.5 | 108.8 | 111.9 | 113.6 | 116.0 | 113.0 | 103.9 | 99.4 | 153.1 |
| 10000 | 98.2 | 100.4 | 101.5 | 103.8 | 105.0 | 105.8 | 107.9 | 111.5 | 111.7 | 114.8 | 110.8 | 103.3 | 98.9 | 152.4 |
| 12500 | 96.4 | 98.7 | 99.5 | 101.6 | 102.2 | 104.0 | 106.5 | 109.4 | 110.4 | 112.1 | 109.1 | 101.2 | 96.1 | 151.2 |
| 16000 | 93.9 | 97.3 | 98.1 | 100.5 | 100.1 | 102.2 | 104.8 | 108.3 | 108.3 | 110.8 | 106.9 | 99.7 | 95.1 | 150.9 |
| 20000 | 89.7 | 94.2 | 94.2 | 97.6 | 96.5 | 98.9 | 101.3 | 103.5 | 105.0 | 106.6 | 102.6 | 95.6 | 91.8 | 148.7 |
| 25000 | 87.2 | 90.0 | 91.3 | 93.9 | 94.1 | 96.4 | 97.8 | 98.5 | 103.1 | 103.0 | 98.1 | 92.0 | 89.2 | 147.8 |
| 31500 | 84.0 | 85.8 | 88.5 | 91.9 | 91.4 | 92.6 | 94.0 | 96.1 | 98.8 | 101.8 | 97.0 | 87.9 | 84.1 | 148.3 |
| 40000 | 79.2 | 81.1 | 82.6 | 86.7 | 84.0 | 87.0 | 88.9 | 91.5 | 93.8 | 97.2 | 93.1 | 82.0 | 78.6 | 147.5 |
| 50000 | 71.7 | 74.7 | 77.4 | 80.6 | 78.0 | 80.2 | 83.5 | 84.2 | 90.0 | 89.7 | 86.1 | 76.7 | 72.4 | 145.7 |
| 63000 | 68.4 | 72.5 | 74.3 | 74.3 | 73.0 | 74.4 | 78.5 | 78.2 | 85.4 | 84.5 | 80.0 | 71.0 | 66.2 | 145.8 |
| 80000 | 61.9 | 65.7 | 68.2 | 70.5 | 68.5 | 68.9 | 72.2 | 74.4 | 80.1 | 80.9 | 75.2 | 61.9 | 57.4 | 148.0 |
| OASPL | 115.4 | 116.0 | 116.8 | 117.9 | 119.4 | 118.1 | 119.3 | 121.5 | 124.6 | 130.4 | 130.7 | 124.1 | 120.1 | 166.7 |

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TEST DATE 12-15-77 TAPE NO. N261 IALPHA SB59 TAMB 35.42
LOCATION C41 ANECH CH AERG. RDG. ADH021 PAMB 29.4523 RELHUM 79.50

MODEL TEST POINT 0512 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.36 SQ IN) - MODEL 112.78 M/SEC (370.0 FPS) FREE-JET SPEED

07/19/79 17.781

390

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F. 70 PERCENT R.H. STD. DAY, 58 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X05120

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 90.2 | 92.4 | 90.8 | 90.8 | 90.1 | 90.5 | 91.1 | 91.7 | 96.9 | 103.1 | 107.0 | 109.4 | 110.7 | 143.6 |
| 315 | 90.2 | 92.4 | 90.7 | 90.8 | 92.2 | 91.8 | 92.0 | 92.3 | 100.3 | 109.2 | 112.8 | 113.0 | 112.2 | 147.5 |
| 400 | 90.9 | 92.2 | 90.9 | 91.5 | 93.5 | 92.9 | 94.0 | 95.3 | 102.4 | 111.6 | 115.3 | 114.0 | 111.3 | 149.2 |
| 500 | 93.2 | 92.8 | 92.7 | 92.9 | 95.6 | 94.8 | 95.2 | 96.8 | 105.0 | 114.4 | 116.9 | 114.5 | 110.8 | 150.7 |
| 630 | 94.7 | 94.6 | 93.3 | 94.2 | 97.5 | 95.5 | 96.5 | 98.7 | 108.0 | 116.3 | 118.0 | 113.1 | 110.7 | 151.6 |
| 800 | 98.6 | 93.7 | 95.8 | 96.0 | 98.9 | 97.3 | 98.3 | 100.9 | 109.8 | 118.0 | 119.6 | 113.6 | 114.0 | 153.4 |
| 1000 | 98.4 | 96.0 | 97.0 | 97.5 | 101.5 | 98.5 | 99.8 | 103.4 | 111.2 | 118.0 | 120.7 | 113.7 | 114.8 | 154.1 |
| 1250 | 101.1 | 101.0 | 102.2 | 101.0 | 103.7 | 101.7 | 102.0 | 104.9 | 112.5 | 119.4 | 121.6 | 114.7 | 115.9 | 155.3 |
| 1600 | 105.1 | 105.9 | 104.8 | 103.0 | 104.0 | 102.3 | 103.3 | 106.2 | 113.3 | 120.3 | 113.5 | 115.3 | 115.3 | 155.3 |
| 2000 | 117.3 | 113.3 | 111.1 | 107.0 | 110.1 | 103.9 | 104.1 | 107.0 | 113.5 | 120.1 | 118.8 | 113.0 | 115.2 | 156.1 |
| 2500 | 117.6 | 118.2 | 117.2 | 114.5 | 116.6 | 108.8 | 106.5 | 107.7 | 114.0 | 118.9 | 117.8 | 112.6 | 114.6 | 157.7 |
| 3150 | 113.3 | 113.9 | 115.4 | 116.3 | 116.7 | 114.0 | 109.9 | 109.6 | 114.6 | 117.8 | 117.4 | 111.8 | 112.8 | 157.1 |
| 4000 | 114.6 | 113.6 | 113.9 | 111.1 | 112.3 | 113.0 | 110.7 | 114.7 | 116.3 | 116.2 | 110.9 | 111.8 | 115.2 | 156.2 |
| 5000 | 110.8 | 111.4 | 116.7 | 110.5 | 112.1 | 110.2 | 112.2 | 114.5 | 117.1 | 115.2 | 109.0 | 111.3 | 115.2 | 155.2 |
| 6300 | 109.6 | 109.8 | 110.3 | 110.9 | 112.0 | 110.9 | 111.1 | 113.2 | 114.8 | 116.8 | 114.0 | 107.7 | 109.6 | 155.2 |
| 8000 | 108.4 | 109.4 | 109.2 | 110.3 | 110.1 | 109.5 | 110.5 | 112.2 | 113.1 | 115.7 | 112.0 | 107.3 | 109.3 | 154.4 |
| 10000 | 106.7 | 108.2 | 108.3 | 110.1 | 108.9 | 108.8 | 109.7 | 111.9 | 112.1 | 113.3 | 110.6 | 105.5 | 106.8 | 153.7 |
| 12500 | 105.4 | 106.0 | 106.4 | 107.8 | 106.1 | 107.0 | 108.3 | 109.8 | 110.6 | 112.6 | 108.9 | 104.5 | 106.3 | 152.9 |
| 16000 | 102.1 | 103.8 | 104.0 | 105.1 | 104.0 | 105.2 | 106.6 | 108.7 | 107.7 | 108.8 | 105.1 | 100.8 | 103.4 | 151.7 |
| 20000 | 99.2 | 101.9 | 102.0 | 103.6 | 100.5 | 101.9 | 103.1 | 103.9 | 106.5 | 106.0 | 101.4 | 98.2 | 102.3 | 150.7 |
| 25000 | 94.4 | 98.3 | 97.5 | 100.1 | 98.5 | 99.4 | 99.5 | 99.1 | 102.8 | 105.3 | 100.8 | 94.5 | 97.1 | 150.2 |
| 31500 | 93.6 | 95.4 | 95.4 | 96.6 | 95.8 | 95.6 | 95.7 | 96.5 | 98.6 | 101.6 | 97.7 | 89.4 | 92.4 | 149.9 |
| 40000 | 89.6 | 90.3 | 91.8 | 93.7 | 88.4 | 90.0 | 90.6 | 91.9 | 95.3 | 94.6 | 91.2 | 84.5 | 86.7 | 148.9 |
| 50000 | 84.4 | 85.2 | 85.4 | 88.2 | 82.4 | 83.2 | 85.3 | 84.6 | 91.7 | 90.3 | 86.1 | 79.9 | 81.5 | 148.2 |
| 63000 | 76.0 | 77.9 | 79.3 | 81.1 | 76.9 | 77.4 | 80.3 | 78.7 | 87.8 | 88.2 | 82.7 | 72.2 | 74.1 | 149.0 |
| 80000 | 68.7 | 69.0 | 71.4 | 72.4 | 72.4 | 71.9 | 74.1 | 74.8 | 78.0 | 78.4 | 72.9 | 62.3 | 64.3 | 147.4 |
| GASPL | 123.2 | 122.8 | 122.4 | 122.1 | 122.6 | 120.3 | 120.4 | 121.3 | 124.8 | 129.6 | 129.8 | 124.7 | 125.2 | 167.5 |

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 370.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 12-15-77 TAPE NO. N281 ALPHA SB59 TANS 35.42
LOCATION C41 ANECH CH AERO. RDG. ADH021 PAMS 29.4523 RELHUM 79.50

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.38 SQ IN) - MODEL 112.78 M/SEC (370.0 FPS) FREE-JET SPEED

ORIGINAL PAGE IS
OF POOR QUALITY

07/19/79 17.781

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X05125

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|------|-------|------------|
| 50 | 69.8 | 72.7 | 72.4 | 73.8 | 75.1 | 75.7 | 76.7 | 77.8 | 78.8 | 84.0 | 92.0 | 94.2 | 90.7 | 84.7 187.8 |
| 63 | 72.1 | 73.2 | 74.2 | 75.1 | 78.3 | 77.6 | 77.8 | 79.0 | 86.5 | 94.8 | 95.8 | 91.2 | 84.1 | 169.1 |
| 80 | 73.5 | 75.0 | 74.8 | 76.4 | 80.1 | 78.2 | 79.1 | 80.9 | 89.4 | 96.7 | 96.8 | 89.7 | 83.9 | 170.1 |
| 100 | 77.4 | 76.0 | 77.2 | 78.2 | 81.4 | 80.0 | 80.9 | 83.1 | 91.2 | 98.3 | 98.4 | 90.1 | 87.0 | 171.8 |
| 125 | 77.0 | 76.3 | 78.4 | 79.5 | 84.0 | 81.1 | 82.2 | 85.5 | 92.5 | 98.3 | 99.3 | 90.0 | 87.6 | 172.5 |
| 160 | 79.6 | 81.1 | 83.4 | 82.9 | 86.1 | 84.2 | 84.4 | 86.9 | 93.7 | 99.5 | 100.1 | 90.8 | 88.3 | 173.7 |
| 200 | 83.3 | 85.7 | 85.8 | 84.8 | 86.2 | 84.7 | 85.5 | 88.0 | 94.3 | 100.2 | 98.5 | 89.2 | 97.3 | 173.7 |
| 250 | 95.2 | 92.9 | 91.9 | 88.6 | 92.1 | 86.1 | 86.1 | 88.6 | 94.3 | 99.7 | 96.7 | 88.4 | 86.5 | 174.5 |
| 315 | 95.1 | 97.4 | 97.7 | 95.7 | 98.4 | 90.7 | 88.3 | 89.0 | 94.5 | 98.1 | 95.3 | 87.4 | 85.1 | 176.0 |
| 400 | 90.3 | 92.8 | 95.6 | 97.2 | 98.1 | 95.6 | 91.3 | 90.6 | 94.7 | 96.6 | 94.4 | 86.0 | 82.3 | 175.4 |
| 500 | 91.1 | 92.0 | 92.4 | 94.8 | 92.3 | 93.6 | 94.1 | 91.4 | 94.5 | 96.7 | 92.7 | 84.4 | 80.4 | 174.6 |
| 630 | 86.3 | 89.4 | 90.2 | 90.8 | 93.0 | 91.3 | 93.1 | 92.5 | 94.1 | 95.2 | 91.2 | 81.8 | 78.8 | 173.6 |
| 800 | 85.1 | 87.5 | 89.5 | 91.0 | 92.6 | 91.7 | 91.8 | 93.3 | 94.0 | 94.5 | 89.5 | 79.8 | 76.0 | 173.5 |
| 1000 | 83.5 | 86.8 | 88.2 | 90.3 | 90.6 | 90.2 | 91.0 | 92.2 | 92.1 | 93.1 | 87.1 | 78.8 | 74.5 | 172.7 |
| 1250 | 81.3 | 85.3 | 87.1 | 89.8 | 89.2 | 89.3 | 90.1 | 91.7 | 90.8 | 90.4 | 85.1 | 76.2 | 70.5 | 172.1 |
| 1600 | 79.1 | 82.4 | 84.7 | 87.3 | 86.2 | 87.2 | 88.4 | 89.3 | 88.9 | 89.1 | 82.6 | 73.8 | 67.7 | 171.3 |
| 2000 | 74.8 | 79.7 | 81.9 | 84.3 | 83.9 | 85.3 | 86.6 | 87.9 | 85.6 | 84.7 | 77.8 | 68.5 | 61.8 | 170.1 |
| 2500 | 70.2 | 75.6 | 79.0 | 82.1 | 79.8 | 81.5 | 82.5 | 83.6 | 80.7 | 72.4 | 63.1 | 55.7 | 169.1 | |
| 3150 | 62.0 | 72.5 | 72.7 | 77.1 | 76.5 | 77.7 | 76.5 | 76.1 | 78.0 | 77.5 | 68.4 | 54.3 | 42.2 | 168.5 |
| 4000 | 53.0 | 62.9 | 66.7 | 70.3 | 70.8 | 71.0 | 70.7 | 70.2 | 70.0 | 69.0 | 59.0 | 40.3 | 23.0 | 168.3 |
| 5000 | 41.2 | 50.2 | 56.9 | 62.0 | 58.4 | 60.6 | 60.6 | 60.1 | 60.4 | 54.5 | 42.8 | 21.8 | | 167.3 |
| 6300 | 18.2 | 30.9 | 38.5 | 45.7 | 42.3 | 43.9 | 45.3 | 42.1 | 44.8 | 36.0 | 19.9 | | | 166.6 |
| 8000 | | | 11.0 | 19.3 | 18.7 | 20.3 | 22.1 | 17.0 | 19.5 | 9.1 | | | | 167.4 |
| 10000 | | | | | | | | | | | | | | 165.6 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

ORIGINAL PAGE 10
OF POOR QUALITY

OASPL 100.3 101.5 102.4 102.8 103.9 101.5 101.3 101.7 104.9 108.9 107.8 99.9 96.4 165.8
PNL 105.1 107.6 108.6 109.7 110.4 108.8 108.5 109.4 110.9 113.5 110.5 101.8 98.4
PNLT 108.1 108.4 109.3 110.3 111.1 108.4 108.5 109.4 111.4 113.5 110.5 101.8 98.4

DIAMETER RATIO 8.288 FREQUENCY SHIFT -9

TEST DATE 12-15-77 TAPE NO. N281 ALPHA SB59 TAMB 35.42
LOCATION C41 ANECH CH AERO. RDG. ADH021 PAMB 29.4523 RELHUM 79.50

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
0500 0512 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 112.78 M/SEC (370.0 FPS)

07/19/79 17.761

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SR 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X05130
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 87.8 | 92.1 | 91.8 | 92.6 | 93.2 | 95.1 | 97.7 | 99.9 | 102.6 | 109.4 | 113.8 | 115.7 | 116.4 | 149.7 |
| 315 | 88.1 | 91.4 | 91.4 | 93.5 | 95.8 | 96.7 | 98.3 | 99.7 | 104.4 | 111.2 | 115.9 | 116.8 | 117.5 | 151.2 |
| 400 | 90.2 | 92.2 | 93.0 | 94.0 | 97.1 | 97.0 | 99.3 | 102.0 | 106.5 | 115.0 | 119.2 | 118.3 | 117.0 | 153.5 |
| 500 | 91.7 | 93.8 | 94.3 | 96.3 | 98.2 | 99.3 | 100.7 | 103.1 | 108.8 | 118.4 | 121.0 | 118.4 | 117.1 | 154.9 |
| 630 | 94.1 | 95.4 | 96.4 | 97.7 | 100.5 | 100.1 | 102.5 | 105.4 | 110.6 | 120.7 | 121.8 | 119.5 | 117.7 | 156.3 |
| 800 | 97.1 | 95.9 | 97.4 | 99.4 | 102.3 | 101.4 | 104.0 | 107.9 | 113.4 | 122.2 | 122.8 | 119.3 | 116.9 | 157.3 |
| 1000 | 101.4 | 102.5 | 102.0 | 104.1 | 103.2 | 105.6 | 108.8 | 114.7 | 123.0 | 122.2 | 119.6 | 117.8 | 115.7 | 157.7 |
| 1250 | 116.3 | 114.8 | 110.8 | 109.1 | 110.7 | 106.8 | 110.2 | 110.6 | 115.0 | 124.9 | 129.8 | 123.7 | 118.1 | 162.5 |
| 1600 | 112.9 | 109.4 | 108.9 | 106.5 | 106.6 | 105.4 | 107.6 | 111.2 | 114.8 | 122.5 | 122.5 | 118.0 | 114.5 | 157.7 |
| 2000 | 110.2 | 111.7 | 112.2 | 112.5 | 110.9 | 106.8 | 107.9 | 111.0 | 114.9 | 122.6 | 120.5 | 115.3 | 112.8 | 157.4 |
| 2500 | 110.1 | 108.4 | 110.4 | 113.7 | 118.5 | 112.2 | 109.7 | 112.2 | 114.0 | 122.5 | 120.9 | 114.6 | 110.9 | 158.2 |
| 3150 | 108.6 | 108.9 | 108.9 | 110.2 | 113.8 | 113.5 | 111.5 | 112.9 | 114.3 | 121.3 | 118.4 | 113.4 | 109.9 | 156.8 |
| 4000 | 108.4 | 108.0 | 108.5 | 109.5 | 110.3 | 111.1 | 113.3 | 113.0 | 113.7 | 119.6 | 117.6 | 111.7 | 108.0 | 155.7 |
| 5000 | 105.8 | 106.4 | 107.5 | 109.0 | 111.9 | 109.2 | 112.3 | 114.0 | 113.1 | 119.9 | 116.8 | 110.2 | 107.2 | 155.6 |
| 6300 | 104.7 | 105.7 | 106.2 | 108.1 | 110.6 | 110.2 | 110.7 | 114.1 | 112.6 | 118.6 | 115.3 | 108.9 | 105.6 | 154.9 |
| 8000 | 103.5 | 105.1 | 106.2 | 108.1 | 109.7 | 109.3 | 110.3 | 113.4 | 111.1 | 118.3 | 113.8 | 107.4 | 103.2 | 154.6 |
| 10000 | 101.7 | 103.2 | 105.1 | 106.9 | 108.5 | 108.8 | 109.7 | 112.6 | 110.2 | 117.3 | 112.6 | 105.8 | 101.7 | 154.2 |
| 12500 | 99.2 | 101.3 | 102.5 | 104.7 | 105.8 | 107.0 | 108.0 | 110.7 | 108.7 | 115.4 | 110.6 | 104.3 | 98.7 | 153.1 |
| 16000 | 97.3 | 100.4 | 101.5 | 103.4 | 103.5 | 105.8 | 106.2 | 108.9 | 106.0 | 114.0 | 108.5 | 102.3 | 95.7 | 152.7 |
| 20000 | 92.9 | 96.9 | 97.2 | 101.1 | 100.0 | 101.8 | 104.0 | 105.2 | 103.0 | 108.6 | 102.3 | 97.8 | 92.5 | 150.3 |
| 25000 | 90.7 | 93.1 | 94.6 | 97.4 | 98.1 | 100.2 | 99.8 | 100.7 | 100.9 | 104.9 | 98.6 | 94.5 | 90.5 | 149.3 |
| 31500 | 87.9 | 89.7 | 91.7 | 95.5 | 95.5 | 95.9 | 96.6 | 98.2 | 97.5 | 104.8 | 97.9 | 90.3 | 85.2 | 150.5 |
| 40000 | 83.1 | 85.1 | 87.3 | 90.7 | 88.4 | 91.2 | 92.0 | 93.5 | 93.3 | 101.0 | 95.0 | 85.9 | 80.0 | 150.3 |
| 50000 | 76.4 | 79.2 | 81.5 | 84.8 | 81.5 | 84.9 | 86.7 | 87.2 | 89.3 | 94.3 | 88.6 | 81.6 | 74.6 | 148.6 |
| 63000 | 71.9 | 74.0 | 76.6 | 79.1 | 77.7 | 78.6 | 81.7 | 81.8 | 85.0 | 87.1 | 82.6 | 75.5 | 68.0 | 148.1 |
| 80000 | 68.4 | 70.3 | 73.5 | 76.4 | 74.5 | 73.7 | 75.8 | 77.5 | 80.2 | 84.4 | 78.3 | 68.4 | 59.5 | 151.0 |

OASPL 120.4 119.8 119.4 120.4 122.8 120.7 121.5 123.7 125.1 133.1 133.8 129.6 127.2 169.6

TEST DATE 12-15-77 TAPE NO. N281 ALPHA SB59 TAMB 39.92
LOCATION C41 ANECH CH AERO. RDG. ADH008 PAMB 29.4403 RELHUM 69.50

MODEL TEST POINT 0513 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.38 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

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07/16/79 17.781

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X05130

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 87.8 | 92.1 | 91.6 | 92.6 | 93.2 | 95.1 | 97.7 | 99.9 | 102.6 | 109.4 | 113.6 | 115.7 | 116.4 | 149.7 |
| 315 | 88.1 | 91.4 | 93.5 | 95.8 | 96.7 | 98.3 | 99.7 | 104.4 | 111.2 | 113.9 | 116.8 | 117.5 | 121.2 | |
| 400 | 90.2 | 92.2 | 93.0 | 94.0 | 97.1 | 97.0 | 99.3 | 102.0 | 106.5 | 116.0 | 119.2 | 118.3 | 117.0 | 153.5 |
| 500 | 91.7 | 93.8 | 94.3 | 96.3 | 98.2 | 99.3 | 100.7 | 103.1 | 108.8 | 118.4 | 121.0 | 118.4 | 117.1 | 154.9 |
| 630 | 94.1 | 95.4 | 96.4 | 97.7 | 100.5 | 100.1 | 102.5 | 105.4 | 110.6 | 120.7 | 121.8 | 119.5 | 117.7 | 156.3 |
| 800 | 97.1 | 95.9 | 97.4 | 99.4 | 102.3 | 101.4 | 104.0 | 107.9 | 113.4 | 122.2 | 122.8 | 119.3 | 116.9 | 157.3 |
| 1000 | 101.4 | 102.5 | 102.0 | 104.1 | 104.1 | 103.2 | 105.6 | 108.8 | 114.7 | 123.0 | 122.2 | 119.6 | 117.8 | 157.7 |
| 1250 | 116.3 | 114.8 | 110.8 | 109.1 | 110.7 | 106.8 | 110.2 | 110.6 | 115.0 | 124.9 | 129.8 | 123.7 | 118.1 | 162.5 |
| 1600 | 112.9 | 109.4 | 108.9 | 106.5 | 106.6 | 105.4 | 107.6 | 111.2 | 114.8 | 122.5 | 122.5 | 118.0 | 114.5 | 157.7 |
| 2000 | 110.2 | 111.7 | 112.2 | 112.5 | 110.9 | 106.8 | 107.9 | 111.0 | 114.9 | 122.6 | 120.5 | 115.3 | 112.8 | 157.4 |
| 2500 | 110.1 | 108.4 | 108.5 | 113.7 | 118.5 | 112.2 | 109.7 | 112.2 | 114.0 | 122.5 | 120.9 | 114.6 | 110.9 | 158.2 |
| 3150 | 108.6 | 108.9 | 108.9 | 110.2 | 113.8 | 113.5 | 111.5 | 112.9 | 114.3 | 121.3 | 118.4 | 113.4 | 109.8 | 156.8 |
| 4000 | 106.4 | 108.0 | 108.5 | 109.5 | 110.3 | 111.1 | 113.3 | 113.0 | 113.7 | 119.6 | 117.6 | 111.7 | 108.0 | 155.7 |
| 5000 | 105.8 | 106.4 | 107.5 | 109.0 | 111.9 | 109.2 | 112.3 | 114.0 | 113.1 | 118.9 | 116.8 | 110.2 | 107.2 | 155.6 |
| 6300 | 104.7 | 105.7 | 106.2 | 108.1 | 110.6 | 110.2 | 110.7 | 114.1 | 112.6 | 118.6 | 115.3 | 108.9 | 105.6 | 154.9 |
| 8000 | 103.5 | 105.1 | 106.2 | 108.1 | 109.7 | 109.3 | 110.3 | 113.4 | 111.1 | 118.3 | 113.8 | 107.4 | 103.2 | 154.6 |
| 10000 | 101.7 | 103.2 | 105.1 | 106.9 | 108.5 | 108.8 | 109.7 | 112.6 | 110.2 | 117.3 | 112.6 | 105.8 | 101.7 | 154.2 |
| 12500 | 99.2 | 101.3 | 102.5 | 104.7 | 105.8 | 107.0 | 108.0 | 110.7 | 108.7 | 115.4 | 110.6 | 104.3 | 98.7 | 153.1 |
| 15000 | 97.3 | 100.4 | 101.5 | 103.4 | 103.5 | 105.8 | 106.2 | 108.9 | 106.0 | 114.0 | 108.5 | 102.3 | 96.7 | 152.7 |
| 20000 | 92.9 | 96.9 | 97.2 | 101.1 | 100.0 | 101.8 | 104.0 | 105.2 | 103.0 | 108.6 | 102.3 | 97.8 | 92.5 | 150.3 |
| 25000 | 90.7 | 93.1 | 94.6 | 97.4 | 98.1 | 100.2 | 99.9 | 100.7 | 100.9 | 104.9 | 98.6 | 94.5 | 90.5 | 149.3 |
| 31500 | 87.9 | 89.7 | 91.7 | 95.5 | 95.5 | 95.9 | 96.6 | 98.2 | 97.5 | 104.8 | 97.9 | 90.3 | 85.2 | 150.5 |
| 40000 | 83.1 | 85.1 | 87.3 | 90.7 | 88.4 | 91.2 | 92.0 | 93.5 | 93.3 | 101.0 | 95.0 | 85.9 | 80.0 | 150.3 |
| 50000 | 76.4 | 79.2 | 81.5 | 84.8 | 81.5 | 84.9 | 86.7 | 87.2 | 89.3 | 94.3 | 88.6 | 81.6 | 74.6 | 148.6 |
| 63000 | 71.9 | 74.0 | 76.6 | 79.1 | 77.7 | 78.6 | 81.7 | 81.8 | 85.0 | 87.1 | 82.6 | 75.5 | 68.0 | 148.1 |
| 80000 | 68.4 | 70.3 | 73.5 | 76.4 | 74.5 | 73.7 | 75.8 | 77.5 | 80.2 | 84.4 | 78.3 | 68.4 | 59.5 | 151.0 |
| OASPL | 120.4 | 119.8 | 119.4 | 120.4 | 122.8 | 120.7 | 121.5 | 123.7 | 125.1 | 133.1 | 133.8 | 129.6 | 127.2 | 169.6 |

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 0. REFRACCTION CORRECTION - YES
 FREE JET DIAMETER (IN) 49.00 TURBULANCE CORRECTION - YES

TEST DATE 12-15-77 TAPE NO. N281 IALPHA SB59 IAMB 39.92
 LOCATION C41 ANECH CH AERG. RDG. ADH008 PAMB 29.4403 RELHUM 69.50

MODEL TEST POINT 0513 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.38 SQ IN) - MODEL SIZE 0. FREE-JET SPEED M/SEC (0. FPS)

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG F, 70 PERCENT R.H., STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X03135

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|-------|------|------|------|------|-------|-------|------|-------|-------|
| 50 | 69.1 | 72.8 | 74.5 | 76.2 | 79.7 | 79.7 | 82.0 | 84.2 | 88.0 | 96.5 | 98.1 | 95.1 | 90.4 | 171.9 |
| 63 | 70.6 | 74.2 | 75.8 | 78.5 | 80.8 | 82.1 | 83.3 | 85.3 | 90.3 | 98.6 | 99.9 | 95.1 | 90.4 | 173.3 |
| 80 | 72.9 | 75.8 | 77.9 | 79.9 | 83.1 | 82.9 | 85.1 | 87.6 | 92.1 | 101.1 | 100.7 | 95.1 | 90.9 | 174.7 |
| 100 | 75.9 | 76.2 | 78.6 | 81.6 | 84.6 | 84.1 | 86.6 | 90.1 | 94.8 | 102.5 | 101.6 | 95.8 | 90.0 | 175.7 |
| 125 | 80.1 | 82.7 | 83.3 | 84.1 | 86.6 | 85.8 | 88.1 | 90.8 | 96.1 | 103.3 | 100.8 | 96.0 | 90.6 | 176.1 |
| 160 | 94.7 | 94.9 | 92.0 | 91.0 | 93.1 | 89.3 | 92.6 | 92.5 | 96.2 | 105.0 | 108.2 | 99.8 | 90.6 | 180.9 |
| 200 | 91.1 | 89.3 | 90.0 | 88.2 | 86.8 | 87.8 | 91.8 | 93.0 | 95.9 | 102.4 | 100.7 | 93.8 | 86.5 | 176.1 |
| 250 | 88.1 | 91.3 | 93.0 | 94.1 | 92.9 | 89.0 | 89.9 | 92.6 | 95.7 | 102.2 | 98.4 | 90.6 | 84.1 | 175.8 |
| 315 | 87.5 | 87.6 | 90.9 | 94.9 | 100.2 | 94.1 | 91.5 | 93.4 | 94.5 | 101.7 | 98.4 | 89.5 | 81.4 | 176.6 |
| 400 | 85.5 | 87.7 | 89.0 | 91.1 | 95.2 | 95.1 | 92.9 | 93.9 | 94.4 | 100.1 | 95.4 | 87.6 | 79.5 | 175.1 |
| 500 | 82.9 | 86.5 | 88.3 | 90.2 | 91.5 | 92.4 | 94.5 | 93.7 | 93.5 | 98.1 | 94.0 | 85.3 | 76.6 | 174.1 |
| 630 | 81.8 | 84.5 | 86.9 | 89.3 | 92.8 | 90.3 | 93.2 | 94.3 | 92.6 | 97.9 | 92.7 | 83.0 | 74.7 | 174.0 |
| 800 | 80.2 | 83.3 | 85.3 | 88.3 | 91.2 | 91.0 | 91.3 | 94.3 | 91.7 | 96.2 | 90.8 | 81.0 | 71.9 | 173.3 |
| 1000 | 78.5 | 82.5 | 85.2 | 88.0 | 90.2 | 90.0 | 90.8 | 93.4 | 90.1 | 95.7 | 88.9 | 78.9 | 68.4 | 173.0 |
| 1250 | 76.3 | 80.2 | 83.8 | 86.6 | 88.9 | 89.4 | 90.1 | 92.3 | 88.9 | 94.4 | 87.2 | 76.5 | 65.5 | 172.6 |
| 1600 | 72.9 | 77.8 | 80.7 | 84.1 | 85.9 | 87.3 | 88.1 | 90.1 | 87.0 | 91.9 | 84.3 | 73.6 | 60.1 | 171.5 |
| 2000 | 70.0 | 76.3 | 79.4 | 82.6 | 83.4 | 86.0 | 86.1 | 88.1 | 83.9 | 89.9 | 81.2 | 70.0 | 55.1 | 171.1 |
| 2500 | 63.9 | 71.5 | 74.2 | 79.6 | 79.4 | 81.4 | 83.4 | 83.7 | 80.0 | 83.3 | 73.3 | 62.7 | 45.9 | 168.7 |
| 3150 | 58.3 | 65.3 | 69.8 | 74.4 | 76.1 | 78.5 | 77.9 | 77.7 | 76.0 | 77.1 | 66.2 | 54.4 | 35.6 | 167.7 |
| 4000 | 49.2 | 57.1 | 63.0 | 69.2 | 70.5 | 71.4 | 71.6 | 71.9 | 68.8 | 72.2 | 59.3 | 41.2 | 15.8 | 168.9 |
| 5000 | 34.7 | 45.0 | 52.4 | 58.9 | 58.4 | 61.8 | 62.0 | 61.7 | 58.4 | 60.9 | 46.6 | 23.2 | 168.7 | 167.0 |
| 6300 | 10.2 | 24.9 | 34.5 | 42.3 | 41.4 | 45.6 | 46.7 | 44.6 | 42.3 | 40.0 | 22.4 | | 166.4 | 169.4 |
| 8000 | | | 8.3 | 17.4 | 19.5 | 21.6 | 23.5 | 20.0 | 16.7 | 8.0 | | | | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| OASPL | 98.2 | 99.1 | 99.7 | 101.4 | 104.3 | 102.1 | 102.7 | 104.4 | 105.6 | 112.6 | 112.0 | 105.3 | 98.9 | 187.8 |
| PNL | 101.4 | 103.3 | 105.1 | 107.8 | 111.0 | 109.3 | 109.7 | 111.2 | 110.6 | 116.7 | 114.9 | 106.8 | 98.3 | |
| PNL | 102.9 | 105.0 | 106.0 | 108.6 | 112.2 | 109.3 | 110.3 | 111.2 | 111.1 | 117.7 | 116.2 | 107.6 | 99.4 | |

DIAMETER RATIO 8.288 FREQUENCY SHIFT -9

TEST DATE 12-15-77 TAPE NO. N231 IALPHA SB59 TAMB 39.92
LOCATION C41 ANECH CH AERO. RDG. ADH008 PAMB 29.4403 RELHUM 69.50

MODEL TEST POINT 0513 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 0. M/SEC (0. FPS) FREE-JET SPEED

07/19/79 17.791

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F. 70 PERCENT R.H. STD. DAY, SB. 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X05143
BACKGROUND FJB300-FMODL X05230

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | 84.8 | 88.8 | 88.3 | 89.8 | 90.0 | 92.8 | 95.0 | 97.1 | 100.1 | 108.4 | 111.3 | 114.0 | 119.1 | 149.3 |
| 63 | 86.4 | 88.4 | 88.4 | 90.5 | 92.6 | 93.7 | 95.6 | 97.2 | 101.4 | 108.2 | 113.4 | 115.6 | 119.5 | 150.4 |
| 80 | 88.4 | 89.7 | 90.7 | 91.7 | 93.8 | 94.4 | 96.1 | 98.7 | 103.7 | 113.3 | 117.2 | 117.3 | 119.0 | 152.3 |
| 100 | 90.2 | 90.8 | 90.8 | 93.1 | 95.7 | 96.0 | 97.4 | 100.1 | 105.6 | 115.8 | 119.2 | 117.7 | 117.1 | 153.3 |
| 125 | 92.4 | 91.1 | 92.9 | 93.9 | 97.8 | 96.4 | 99.0 | 102.7 | 108.4 | 118.2 | 120.8 | 117.5 | 115.7 | 154.5 |
| 160 | 94.1 | 92.1 | 94.1 | 96.4 | 98.8 | 98.4 | 100.5 | 104.9 | 110.6 | 120.2 | 121.8 | 116.0 | 113.4 | 155.5 |
| 200 | 96.7 | 103.7 | 101.0 | 105.4 | 100.7 | 102.6 | 107.3 | 112.7 | 122.0 | 125.7 | 117.6 | 113.5 | 158.3 | |
| 250 | 103.8 | 103.8 | 104.6 | 103.9 | 105.4 | 102.8 | 104.2 | 108.4 | 113.7 | 121.4 | 124.0 | 115.9 | 112.6 | 157.3 |
| 315 | 102.2 | 103.4 | 106.7 | 104.6 | 103.4 | 104.8 | 108.5 | 114.1 | 121.8 | 122.7 | 114.5 | 111.5 | 157.1 | |
| 400 | 108.2 | 111.7 | 113.0 | 115.5 | 113.6 | 105.3 | 105.4 | 109.3 | 114.6 | 123.1 | 121.5 | 112.8 | 111.3 | 158.0 |
| 500 | 106.8 | 106.6 | 109.4 | 113.2 | 116.2 | 111.0 | 108.0 | 110.4 | 114.3 | 122.5 | 119.4 | 111.4 | 110.1 | 157.3 |
| 630 | 108.1 | 107.7 | 108.2 | 112.3 | 113.7 | 111.0 | 111.4 | 115.1 | 123.5 | 118.2 | 110.2 | 108.7 | 156.1 | |
| 800 | 104.4 | 106.0 | 107.5 | 108.5 | 108.3 | 109.8 | 113.1 | 112.5 | 114.7 | 119.1 | 108.5 | 107.5 | 155.2 | |
| 1000 | 104.6 | 105.2 | 106.0 | 107.7 | 109.6 | 107.7 | 111.0 | 113.2 | 114.6 | 119.4 | 116.2 | 107.4 | 106.2 | 155.0 |
| 1250 | 103.5 | 104.9 | 105.4 | 107.4 | 108.8 | 109.2 | 109.4 | 113.1 | 114.6 | 117.8 | 115.1 | 105.6 | 105.8 | 154.4 |
| 1600 | 102.2 | 104.6 | 105.2 | 107.1 | 107.5 | 107.8 | 109.3 | 112.9 | 113.6 | 117.8 | 113.5 | 104.4 | 103.7 | 154.2 |
| 2000 | 101.0 | 102.6 | 104.1 | 105.3 | 106.2 | 107.3 | 109.0 | 112.3 | 112.0 | 116.6 | 112.1 | 103.1 | 103.2 | 153.6 |
| 2500 | 98.4 | 100.5 | 101.9 | 103.7 | 103.8 | 105.7 | 107.0 | 110.2 | 111.4 | 114.4 | 110.6 | 101.2 | 100.2 | 152.6 |
| 3150 | 96.5 | 99.3 | 100.4 | 103.1 | 101.6 | 104.0 | 105.4 | 108.3 | 108.9 | 112.1 | 107.9 | 99.5 | 98.1 | 151.9 |
| 4000 | 92.8 | 96.3 | 96.5 | 99.7 | 98.4 | 100.2 | 102.6 | 104.3 | 105.6 | 108.0 | 102.7 | 94.9 | 94.9 | 149.8 |
| 5000 | 90.0 | 92.6 | 93.4 | 95.8 | 96.4 | 98.0 | 98.7 | 99.6 | 103.2 | 104.4 | 98.5 | 91.6 | 92.6 | 148.9 |
| 6300 | 86.4 | 88.4 | 90.1 | 93.7 | 93.2 | 93.7 | 95.3 | 97.0 | 99.7 | 103.5 | 98.2 | 87.3 | 87.5 | 149.6 |
| 8000 | 81.6 | 83.7 | 85.5 | 88.6 | 85.6 | 89.2 | 90.5 | 92.2 | 94.7 | 99.2 | 93.7 | 81.4 | 81.2 | 148.9 |
| 10000 | 74.9 | 77.1 | 79.3 | 82.5 | 78.6 | 82.9 | 84.7 | 85.3 | 90.9 | 92.4 | 87.3 | 75.6 | 74.8 | 147.3 |
| 12500 | 68.9 | 71.6 | 73.5 | 75.5 | 72.9 | 76.8 | 78.6 | 79.7 | 86.4 | 87.2 | 80.7 | 69.5 | 68.2 | 147.3 |
| 16000 | 64.3 | 68.1 | 68.9 | 71.2 | 67.4 | 71.6 | 72.4 | 74.6 | 80.8 | 83.2 | 76.6 | 61.3 | 58.9 | 149.3 |
| 20000 | 117.1 | 117.6 | 118.6 | 120.2 | 121.2 | 119.6 | 120.1 | 122.5 | 125.3 | 132.0 | 132.4 | 126.6 | 126.7 | 168.3 |

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TEST DATE 12-15-77 TAPE NO. N281 ALPHA SB59 TAMB 37.04
LOCATION C41 ANECH CH AERO. RDG. ADH013 PAMB 29.4562 RELHUM 75.70

MODEL TEST POINT 0514 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 131.5 SQ CH (20.38 SQ IN) - MODEL 84.73 M/SEC (278.0 FPS) FREE-JET SPEED

LEVELS

| | PERCENT | F. | 70 PERCENT | R.H. | STD. | DAY. | S.B. |
|------------|---------|----|------------|------|------|------|------|
| 559.0 DEG. | F. | | | | | | |

IDENTIFICATION - FJ-300-FMDDL X05140

ANGLES MEASURED FROM INLET DEGREES

[illegible]

63

100

160

250

400

630

000

600

500

200

003

000

000

000 000

Office

000 000

01010

745

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1

130

1

1

10

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| MODEL/EMI | SIZE | SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | REFRACTION CORRECTION - YES |
|-----------|-------|--------------|----------------------------|-----------------------------|
| INPUT | 1.000 | CALC. 1.000 | FREE JET DIAMETER (IN) | TURBULANCE CORRECTION - YES |
| | | | 278.00 | 48.00 |

| TEST DATE | 12-18-77 | TAPE NO. | N281 | I ALPHA | S859 | TAMB | 37.04 |
|-----------|--------------|----------|------|---------|------|---------|--------------|
| LOCATION | C41 ANECH CH | AERO. | RDG. | ADH013 | PAMB | 29.4562 | RELHUM 75.70 |

| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
|-------|------------|-----------------------|----------------------------|--------------------------------|
| 9500 | 0514 | 12.2 M (40.0 FT) ARC | 131.5 SQ CM (20.38 SQ IN) | MODEL 84.73 M/SEC (278.0 FPS) |

NSA

07/19/79 17.781

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F. 70 PERCENT R.H. STD. DAY. SB. 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X05145

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|-------|------|------|------|------|-------|-------|------|------|-------|
| 50 | 70.5 | 73.2 | 73.3 | 76.3 | 77.7 | 77.4 | 77.8 | 79.0 | 85.4 | 94.0 | 95.6 | 92.7 | 91.0 | 169.9 |
| 63 | 72.5 | 74.5 | 75.6 | 77.6 | 79.6 | 79.0 | 79.4 | 80.8 | 88.9 | 97.4 | 98.6 | 94.4 | 92.3 | 172.4 |
| 80 | 74.2 | 76.5 | 76.6 | 78.5 | 81.7 | 79.3 | 81.1 | 83.7 | 90.9 | 99.2 | 99.6 | 93.5 | 91.8 | 173.3 |
| 100 | 76.4 | 75.8 | 77.7 | 81.0 | 82.7 | 81.3 | 82.4 | 85.5 | 93.1 | 101.1 | 103.6 | 95.6 | 93.3 | 176.2 |
| 125 | 77.9 | 76.7 | 78.9 | 85.2 | 89.0 | 83.7 | 84.4 | 87.7 | 94.1 | 100.4 | 101.9 | 93.9 | 92.3 | 175.7 |
| 160 | 83.9 | 82.3 | 87.8 | 87.6 | 88.9 | 85.7 | 86.0 | 88.8 | 94.3 | 100.6 | 100.4 | 92.1 | 90.7 | 174.7 |
| 200 | 88.2 | 87.1 | 88.2 | 90.8 | 88.1 | 86.3 | 86.5 | 88.8 | 94.8 | 101.8 | 98.9 | 90.0 | 89.9 | 174.9 |
| 250 | 95.3 | 94.0 | 93.5 | 99.4 | 97.1 | 88.1 | 87.0 | 89.5 | 94.3 | 101.0 | 96.6 | 88.3 | 88.2 | 176.2 |
| 315 | 89.8 | 94.7 | 86.6 | 97.9 | 100.1 | 93.6 | 89.5 | 90.5 | 95.0 | 99.0 | 95.2 | 86.8 | 86.1 | 176.1 |
| 400 | 90.7 | 91.4 | 94.2 | 92.0 | 95.6 | 96.3 | 92.4 | 91.4 | 94.7 | 97.6 | 94.0 | 84.9 | 84.5 | 174.9 |
| 500 | 88.4 | 91.0 | 91.1 | 92.2 | 91.6 | 92.4 | 94.6 | 92.6 | 94.6 | 97.7 | 92.9 | 83.3 | 81.9 | 174.4 |
| 630 | 85.4 | 88.5 | 90.7 | 91.3 | 92.9 | 90.3 | 92.5 | 93.2 | 94.9 | 96.4 | 91.9 | 81.5 | 81.3 | 174.0 |
| 800 | 85.0 | 87.3 | 88.8 | 90.9 | 92.1 | 91.9 | 91.2 | 93.4 | 94.4 | 96.8 | 90.5 | 80.1 | 78.4 | 174.2 |
| 1000 | 83.4 | 86.6 | 88.1 | 90.8 | 91.1 | 91.0 | 91.5 | 93.6 | 92.8 | 95.5 | 88.9 | 79.3 | 76.9 | 173.9 |
| 1250 | 81.4 | 85.9 | 87.7 | 89.2 | 90.1 | 90.9 | 91.4 | 93.1 | 92.3 | 93.2 | 87.1 | 75.9 | 72.8 | 173.5 |
| 1600 | 79.0 | 83.2 | 86.0 | 87.2 | 87.4 | 89.0 | 89.2 | 90.7 | 89.9 | 91.0 | 84.2 | 73.4 | 68.9 | 172.5 |
| 2000 | 75.0 | 79.9 | 83.0 | 86.3 | 85.1 | 87.1 | 87.4 | 88.8 | 86.7 | 86.7 | 78.4 | 67.6 | 63.1 | 171.3 |
| 2500 | 70.9 | 77.1 | 80.2 | 82.3 | 81.3 | 82.8 | 84.1 | 84.0 | 84.0 | 82.5 | 74.5 | 62.1 | 56.5 | 170.2 |
| 3150 | 63.2 | 71.0 | 73.8 | 76.8 | 78.0 | 79.3 | 78.8 | 77.7 | 79.4 | 79.8 | 70.0 | 53.5 | 43.7 | 170.0 |
| 4000 | 53.4 | 61.9 | 66.1 | 72.3 | 72.2 | 72.1 | 72.4 | 71.7 | 71.4 | 71.6 | 60.2 | 39.5 | 23.8 | 169.7 |
| 5000 | 41.0 | 50.8 | 56.9 | 61.7 | 59.5 | 62.7 | 62.6 | 61.5 | 61.8 | 57.8 | 44.4 | 20.4 | | 168.7 |
| 6300 | 18.0 | 31.5 | 39.8 | 44.8 | 42.5 | 46.6 | 46.7 | 43.9 | 46.2 | 39.2 | 21.0 | | | 166.1 |
| 8000 | | | | | | | | | | | | | | 169.0 |
| 10000 | | | | | | | | | | | | | | 167.3 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63100 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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OASPL 99.3 100.6 102.1 104.2 104.8 102.3 101.8 102.8 105.5 110.6 109.7 102.5 100.9 187.1
 PNL 104.6 106.5 108.4 110.5 111.5 109.8 109.4 110.4 111.7 115.1 111.6 103.1 101.4
 PNL 105.8 106.5 109.2 111.4 112.6 110.4 109.4 110.4 112.3 115.1 111.8 103.1 101.4

DIAMETER RATIO 8.288 FREQUENCY SHIFT -9

TEST DATE 12-15-77 TAPE NO. N281 ALPHA S859 TANG 37.04
 LOCATION C41 ANECH CH AERO. RDG. ADH013 PAMB 29.4562 RELHUM 75.70

MODEL TEST POINT 0514 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 84.73 M/SEC (278.0 FPS)
 SIZE

07/19/79 17.781

398

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X05150
BACKGROUND FJB400-FMODL X05220

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | 84.5 | 87.5 | 87.8 | 89.1 | 89.7 | 91.8 | 94.2 | 96.8 | 98.6 | 106.6 | 111.5 | 114.0 | 114.9 | 147.7 |
| 63 | 85.6 | 87.6 | 87.4 | 89.4 | 91.3 | 92.6 | 94.5 | 95.2 | 101.2 | 108.7 | 113.4 | 115.1 | 115.2 | 148.9 |
| 80 | 87.4 | 88.7 | 89.7 | 90.5 | 93.3 | 93.4 | 96.1 | 98.5 | 103.4 | 113.0 | 116.9 | 116.3 | 113.7 | 151.0 |
| 100 | 89.2 | 90.2 | 90.5 | 92.6 | 95.4 | 95.5 | 97.1 | 99.6 | 105.5 | 116.1 | 119.2 | 116.2 | 110.8 | 152.6 |
| 125 | 93.4 | 91.1 | 92.1 | 93.7 | 96.7 | 96.1 | 98.5 | 101.9 | 108.1 | 117.9 | 120.3 | 116.3 | 109.2 | 153.7 |
| 160 | 92.6 | 91.9 | 93.4 | 95.4 | 98.0 | 97.9 | 100.8 | 104.4 | 110.6 | 119.5 | 121.6 | 114.8 | 106.7 | 154.8 |
| 200 | 98.4 | 100.7 | 103.5 | 102.3 | 103.6 | 99.5 | 102.6 | 106.5 | 112.2 | 121.5 | 122.9 | 114.9 | 107.8 | 156.5 |
| 250 | 106.3 | 106.3 | 103.8 | 103.1 | 104.2 | 102.1 | 102.1 | 107.6 | 113.7 | 121.4 | 122.8 | 113.4 | 107.4 | 156.5 |
| 315 | 112.9 | 111.2 | 110.7 | 108.2 | 105.1 | 103.2 | 105.1 | 109.0 | 114.6 | 121.5 | 123.2 | 113.5 | 107.2 | 157.3 |
| 400 | 108.9 | 112.0 | 113.0 | 115.8 | 112.9 | 106.1 | 105.6 | 109.3 | 115.1 | 122.6 | 120.8 | 112.0 | 107.3 | 157.6 |
| 500 | 106.1 | 106.1 | 108.4 | 112.4 | 116.2 | 111.7 | 108.5 | 110.4 | 114.8 | 122.5 | 119.4 | 110.9 | 106.4 | 157.2 |
| 630 | 106.8 | 107.4 | 107.4 | 107.9 | 112.3 | 114.2 | 112.0 | 112.2 | 115.0 | 120.5 | 118.2 | 110.4 | 105.7 | 156.2 |
| 800 | 104.9 | 105.2 | 107.5 | 109.0 | 108.8 | 109.8 | 113.8 | 113.0 | 115.2 | 118.9 | 116.8 | 108.7 | 103.5 | 155.2 |
| 1000 | 104.6 | 104.9 | 105.5 | 107.7 | 110.4 | 108.5 | 111.3 | 114.2 | 114.6 | 118.3 | 116.5 | 107.9 | 102.9 | 154.9 |
| 1250 | 104.0 | 104.4 | 105.2 | 107.4 | 109.5 | 109.4 | 110.4 | 114.1 | 114.8 | 117.8 | 114.8 | 106.1 | 101.8 | 154.6 |
| 1600 | 101.9 | 103.8 | 104.2 | 107.0 | 108.2 | 108.0 | 109.8 | 113.4 | 114.4 | 117.3 | 113.5 | 103.4 | 100.4 | 154.3 |
| 2000 | 100.7 | 102.4 | 103.0 | 105.8 | 106.9 | 107.8 | 109.7 | 112.8 | 112.9 | 116.0 | 112.1 | 104.1 | 99.9 | 153.8 |
| 2500 | 98.4 | 100.0 | 100.9 | 103.9 | 104.2 | 106.5 | 107.5 | 110.9 | 111.1 | 113.6 | 109.6 | 102.2 | 97.6 | 152.5 |
| 3150 | 96.2 | 98.5 | 99.9 | 102.5 | 101.8 | 104.7 | 106.1 | 109.3 | 109.1 | 112.1 | 107.9 | 101.0 | 95.6 | 152.2 |
| 4000 | 92.3 | 96.2 | 96.0 | 99.7 | 98.6 | 100.9 | 103.3 | 104.8 | 105.8 | 107.9 | 103.4 | 96.1 | 92.3 | 150.1 |
| 5000 | 89.3 | 91.9 | 93.4 | 96.0 | 96.4 | 99.0 | 99.7 | 100.3 | 103.4 | 103.9 | 99.2 | 92.5 | 90.3 | 149.1 |
| 6300 | 86.4 | 88.6 | 90.1 | 94.0 | 94.0 | 94.7 | 95.6 | 98.0 | 99.9 | 102.9 | 97.9 | 88.5 | 85.7 | 149.7 |
| 8000 | 82.1 | 84.2 | 85.5 | 89.6 | 86.6 | 89.7 | 91.0 | 93.2 | 95.0 | 97.9 | 93.5 | 82.9 | 80.2 | 148.8 |
| 10000 | 75.6 | 78.4 | 80.6 | 84.0 | 80.6 | 83.1 | 85.9 | 86.3 | 91.4 | 91.2 | 86.8 | 77.3 | 74.3 | 147.5 |
| 12500 | 70.6 | 72.6 | 76.5 | 78.8 | 76.7 | 77.1 | 80.9 | 81.2 | 86.9 | 85.7 | 81.5 | 71.7 | 68.4 | 147.8 |
| 16000 | 66.5 | 69.4 | 73.9 | 76.2 | 72.7 | 72.3 | 75.4 | 76.1 | 81.0 | 82.4 | 76.9 | 63.8 | 59.6 | 150.1 |
| 20000 | 117.3 | 117.9 | 118.4 | 120.3 | 121.2 | 120.0 | 120.7 | 123.0 | 125.5 | 131.7 | 131.7 | 125.5 | 121.8 | 168.0 |

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TEST DATE 12-15-77 TAPE NO. N281 IALPHA SB59 TAMB 36.14
LOCATION C41 ANECH CH AERO. RDG. ADH022 PAMB 29.4523 RELHUM 79.30

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
0500 0515 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.38 SQ IN) - MODEL 112.78 M/SEC (370.0 FPS)

07/18/79 17.781

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X05150

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|--------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|-----|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | | | | | | | | | | | | | | |
| 315 | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | | |
| 630 | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | |
| 1000 | | | | | | | | | | | | | | |
| 1250 | | | | | | | | | | | | | | |
| 1600 | | | | | | | | | | | | | | |
| 2000 | | | | | | | | | | | | | | |
| 2500 | | | | | | | | | | | | | | |
| 3150 | | | | | | | | | | | | | | |
| 4000 | | | | | | | | | | | | | | |
| 5000 | | | | | | | | | | | | | | |
| 6300 | | | | | | | | | | | | | | |
| 8000 | | | | | | | | | | | | | | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |
| 100000 | | | | | | | | | | | | | | |

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| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| QASPL | 124.9 | 124.4 | 123.8 | 124.4 | 124.5 | 122.1 | 121.8 | 122.8 | 125.8 | 130.9 | 130.7 | 126.1 | 126.6 | 168.9 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|

| | | | | |
|------------|-------------------|----------------------------|--------|-----------------------------|
| MODEL/ENVI | SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 370.00 | REFLECTION CORRECTION - YES |
| INPUT | 1.000 | CALC. | 1.000 | TURBULANCE CORRECTION - YES |

| | | | | | | | |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| TEST DATE | 12-15-77 | TAPE NO. | N281 | ALPHA | SB59 | TAPB | 38.14 |
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH022 | PAMB | 29.4523 | RELHUM | 79.30 |

| | | | | |
|-------|------------|-----------------------|----------------------------|-----------------------------------|
| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
| 0500 | 0515 | 12.2 M (40.0 FT) ARC | 131.5 SQ CH (20.38 SQ IN) | - MODEL 112.78 M/SEC (370.0 FPS) |

07/19/79 17.761

400

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X05155

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|-------|-------|------|------|------|------|-------|-------|------|------|-------|
| 50 | 71.6 | 74.0 | 73.5 | 74.8 | 77.7 | 76.4 | 78.0 | 79.0 | 85.0 | 94.1 | 95.8 | 92.0 | 86.7 | 169.2 |
| 63 | 73.3 | 75.0 | 75.8 | 75.8 | 79.8 | 78.6 | 78.8 | 79.7 | 87.6 | 96.0 | 97.0 | 92.7 | 86.8 | 170.5 |
| 80 | 75.0 | 76.5 | 76.6 | 77.9 | 81.1 | 79.2 | 80.1 | 82.0 | 90.3 | 97.6 | 98.5 | 92.0 | 86.3 | 171.6 |
| 100 | 78.4 | 76.9 | 77.8 | 78.8 | 82.4 | 81.0 | 82.4 | 84.4 | 92.3 | 100.2 | 100.6 | 93.4 | 89.8 | 174.0 |
| 125 | 78.3 | 78.0 | 79.4 | 80.8 | 87.8 | 82.6 | 84.3 | 86.5 | 93.8 | 100.0 | 100.3 | 91.8 | 89.2 | 173.9 |
| 160 | 82.3 | 85.5 | 88.5 | 87.0 | 88.2 | 85.3 | 85.4 | 87.6 | 94.7 | 100.2 | 100.8 | 91.7 | 88.8 | 174.6 |
| 200 | 90.8 | 91.4 | 88.8 | 87.6 | 89.1 | 86.4 | 86.8 | 89.0 | 95.3 | 101.2 | 98.3 | 90.1 | 88.4 | 174.7 |
| 250 | 97.6 | 96.5 | 96.0 | 92.9 | 97.3 | 89.3 | 87.3 | 89.3 | 95.0 | 101.1 | 96.8 | 88.6 | 86.9 | 176.3 |
| 315 | 95.0 | 98.3 | 98.9 | 100.8 | 101.1 | 95.0 | 90.2 | 90.4 | 95.5 | 99.4 | 95.8 | 88.5 | 86.4 | 177.8 |
| 400 | 92.6 | 93.1 | 95.1 | 98.2 | 97.1 | 97.5 | 93.8 | 92.3 | 95.7 | 97.8 | 94.3 | 86.4 | 83.1 | 176.2 |
| 500 | 92.8 | 94.0 | 93.8 | 93.6 | 93.3 | 93.3 | 95.9 | 93.3 | 95.3 | 97.2 | 93.7 | 84.9 | 81.4 | 175.5 |
| 630 | 87.8 | 90.4 | 92.2 | 93.6 | 95.0 | 92.3 | 93.6 | 89.4 | 94.8 | 95.3 | 96.4 | 91.7 | 82.6 | 174.9 |
| 800 | 88.9 | 88.8 | 90.0 | 92.2 | 94.1 | 93.2 | 92.8 | 94.8 | 94.8 | 95.7 | 90.0 | 81.3 | 77.0 | 174.7 |
| 1000 | 85.7 | 87.8 | 89.4 | 91.8 | 92.6 | 91.7 | 92.0 | 93.7 | 93.3 | 94.4 | 88.4 | 79.5 | 76.5 | 174.1 |
| 1250 | 83.0 | 86.8 | 88.0 | 91.1 | 91.2 | 91.3 | 91.9 | 93.0 | 91.6 | 91.9 | 85.7 | 77.2 | 72.1 | 173.5 |
| 1500 | 80.6 | 84.4 | 86.2 | 89.3 | 88.2 | 89.8 | 89.4 | 90.8 | 89.7 | 90.4 | 83.7 | 75.1 | 68.3 | 172.7 |
| 2000 | 76.8 | 80.9 | 83.1 | 86.6 | 85.7 | 87.9 | 87.8 | 89.0 | 86.5 | 86.1 | 78.7 | 69.1 | 62.4 | 171.5 |
| 2500 | 72.4 | 77.9 | 80.8 | 84.1 | 81.9 | 83.5 | 84.6 | 83.8 | 84.3 | 82.0 | 74.1 | 64.5 | 58.1 | 170.7 |
| 3150 | 64.5 | 72.5 | 74.5 | 79.1 | 78.8 | 80.3 | 79.8 | 78.2 | 79.1 | 78.7 | 69.3 | 55.0 | 43.8 | 170.3 |
| 4000 | 57.1 | 64.7 | 68.8 | 72.4 | 73.4 | 73.1 | 72.4 | 72.1 | 71.2 | 69.8 | 59.5 | 41.3 | 24.7 | 169.8 |
| 5000 | 43.5 | 53.1 | 58.5 | 64.1 | 61.1 | 63.2 | 62.8 | 61.9 | 61.9 | 56.0 | 43.5 | 22.5 | | 169.2 |
| 6300 | 21.1 | 34.1 | 41.4 | 48.6 | 45.0 | 46.8 | 47.7 | 44.4 | 46.3 | 37.3 | 21.4 | | | 168.7 |
| 8000 | | 2.2 | 14.1 | 22.7 | 22.4 | 23.0 | 24.6 | 20.0 | 20.6 | | | | | 169.4 |
| 10000 | | | | | | | | | | | | | | 168.3 |

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OSAPL 102.0 103.3 103.8 105.2 105.8 103.4 102.7 103.2 105.8 110.2 108.7 101.4 97.8 167.2
 PNL 106.9 109.1 110.1 112.0 112.4 110.8 110.1 110.7 111.9 114.8 111.2 102.9 99.5
 PNL T 107.7 109.8 111.1 112.9 113.5 111.4 110.1 110.7 112.4 114.8 111.2 102.9 100.6

DIAMETER RATIO 8.288 FREQUENCY SHIFT -9

TEST DATE 12-15-77 TAPE NO. N281 IALPHA SB59 TAMB 36.14
 LOCATION C41 ANECH CH AERO. RDG. ADH022 PAMB 29.4523 RELHUM 79.30

MODEL TEST POINT 0515 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 112.76 M/SEC (370.0 FPS)
 SIZE

FREE-JET SPEED

07/19/79 17.761

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. E., 70 PERCENT R.H., STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X05160
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

10000000

12500000

16000000

20000000

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TEST DATE 12-15-77 TAPE NO. W281 IALPHA SB59 TAMB 39.74
LOCATION C41 ANECH CH AERO. RDG. ADH009 PAMB 29.4393 RELHUM 70.30

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 131.5 SQ CH (20.38 SQ IN) - MODEL 0. FREE-JET SPEED
0500 0516

401

07/19/79 17.781

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODEL X05160

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|-----|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | | | | | | | | | | | | | | |
| 315 | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | | |
| 630 | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | |
| 1000 | | | | | | | | | | | | | | |
| 1250 | | | | | | | | | | | | | | |
| 1600 | | | | | | | | | | | | | | |
| 2000 | | | | | | | | | | | | | | |
| 2500 | | | | | | | | | | | | | | |
| 3150 | | | | | | | | | | | | | | |
| 4000 | | | | | | | | | | | | | | |
| 5000 | | | | | | | | | | | | | | |
| 6300 | | | | | | | | | | | | | | |
| 8000 | | | | | | | | | | | | | | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |
| GASPL | | | | | | | | | | | | | | |

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| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | 89.5 | 94.1 | 93.6 | 94.4 | 94.5 | 96.8 | 99.5 | 101.6 | 104.6 | 110.6 | 116.3 | 119.0 | 122.1 | 153.3 |
| 63 | 90.1 | 92.4 | 92.4 | 94.5 | 97.1 | 97.9 | 99.6 | 101.5 | 105.7 | 113.2 | 117.9 | 119.6 | 122.7 | 154.3 |
| 80 | 92.2 | 93.7 | 95.5 | 97.8 | 98.0 | 100.3 | 103.5 | 107.7 | 117.3 | 121.2 | 121.3 | 123.0 | 123.0 | 156.3 |
| 100 | 93.5 | 95.0 | 95.3 | 97.3 | 99.4 | 99.8 | 101.4 | 103.8 | 109.8 | 120.1 | 123.2 | 121.7 | 123.1 | 157.7 |
| 125 | 96.1 | 96.4 | 97.1 | 98.4 | 101.5 | 100.4 | 103.3 | 106.2 | 112.1 | 122.2 | 123.6 | 122.0 | 123.7 | 158.7 |
| 160 | 100.1 | 97.9 | 99.1 | 100.4 | 103.0 | 102.1 | 104.8 | 108.7 | 114.1 | 123.5 | 125.3 | 121.8 | 122.7 | 159.5 |
| 200 | 115.2 | 113.2 | 107.0 | 105.0 | 106.4 | 105.0 | 106.1 | 109.8 | 116.5 | 125.0 | 126.9 | 121.6 | 122.5 | 161.0 |
| 250 | 116.0 | 114.6 | 110.3 | 108.1 | 109.2 | 106.8 | 107.4 | 111.1 | 117.0 | 124.6 | 126.5 | 120.2 | 120.6 | 160.7 |
| 315 | 117.1 | 114.9 | 115.7 | 114.2 | 111.1 | 106.9 | 108.6 | 112.0 | 117.1 | 124.5 | 123.7 | 116.2 | 119.0 | 160.0 |
| 400 | 112.2 | 114.2 | 115.2 | 117.3 | 118.1 | 110.6 | 109.9 | 112.5 | 117.4 | 125.1 | 122.3 | 115.3 | 117.8 | 160.2 |
| 500 | 112.6 | 111.4 | 112.6 | 114.4 | 119.0 | 116.7 | 112.5 | 112.9 | 117.3 | 124.7 | 120.9 | 115.6 | 116.1 | 159.9 |
| 630 | 111.1 | 111.6 | 112.4 | 113.2 | 114.8 | 116.2 | 116.5 | 115.2 | 117.6 | 122.8 | 119.2 | 113.9 | 114.7 | 158.9 |
| 800 | 109.9 | 110.7 | 111.5 | 113.0 | 114.1 | 112.6 | 116.6 | 116.3 | 117.2 | 121.4 | 118.0 | 112.7 | 113.0 | 158.1 |
| 1000 | 109.1 | 110.9 | 112.2 | 114.6 | 113.2 | 113.8 | 117.2 | 116.9 | 121.4 | 117.5 | 112.2 | 111.9 | 112.9 | 157.9 |
| 1250 | 108.0 | 108.6 | 109.4 | 111.6 | 114.0 | 113.9 | 113.7 | 116.9 | 116.1 | 120.0 | 115.8 | 110.4 | 111.1 | 157.3 |
| 1600 | 106.5 | 108.4 | 109.2 | 111.6 | 112.0 | 112.8 | 115.3 | 115.9 | 115.6 | 119.8 | 115.3 | 108.9 | 108.7 | 157.1 |
| 2000 | 106.0 | 107.4 | 108.3 | 110.1 | 111.7 | 112.1 | 113.0 | 115.1 | 114.5 | 118.8 | 113.4 | 107.6 | 108.2 | 156.7 |
| 2500 | 103.5 | 105.3 | 106.5 | 108.2 | 108.8 | 110.5 | 110.8 | 113.5 | 112.5 | 116.7 | 112.1 | 105.3 | 105.0 | 155.5 |
| 3150 | 101.8 | 104.7 | 105.5 | 107.1 | 106.7 | 109.3 | 109.7 | 111.6 | 110.7 | 115.5 | 110.3 | 104.1 | 102.7 | 155.4 |
| 4000 | 97.7 | 101.9 | 101.4 | 104.6 | 103.5 | 105.6 | 106.7 | 107.2 | 108.2 | 111.9 | 103.6 | 100.3 | 98.2 | 153.6 |
| 5000 | 94.5 | 97.6 | 98.6 | 100.9 | 101.1 | 103.4 | 103.1 | 103.2 | 106.6 | 108.4 | 100.4 | 96.7 | 95.7 | 152.9 |
| 6300 | 91.6 | 93.9 | 95.2 | 99.2 | 99.0 | 99.4 | 99.6 | 100.2 | 103.5 | 107.5 | 99.7 | 93.0 | 91.2 | 153.8 |
| 8000 | 87.4 | 89.1 | 91.3 | 94.4 | 91.7 | 95.2 | 95.0 | 96.7 | 98.8 | 103.3 | 95.8 | 87.7 | 85.5 | 153.3 |
| 10000 | 81.2 | 83.2 | 86.0 | 88.1 | 85.0 | 88.7 | 90.3 | 89.7 | 94.8 | 97.4 | 89.7 | 82.9 | 78.6 | 152.0 |
| 12500 | 76.7 | 78.0 | 80.9 | 82.9 | 80.5 | 82.7 | 83.2 | 85.1 | 91.0 | 92.2 | 84.1 | 78.3 | 73.0 | 152.6 |
| 16000 | 72.9 | 74.8 | 77.8 | 80.6 | 77.1 | 78.2 | 79.3 | 80.5 | 86.7 | 89.4 | 79.5 | 71.2 | 65.0 | 155.7 |
| GASPL | 123.2 | 122.7 | 123.7 | 125.2 | 123.9 | 124.2 | 125.9 | 128.0 | 134.7 | 134.5 | 131.0 | 132.4 | 171.6 | |

| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 0. | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|-------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 12-15-77 | TAPE NO. | N281 | ALPHA | SB59 | TANB | 39.74 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH009 | PAMB | 29.4393 | RELHUM | 70.30 |

| MODEL | TEST POINT | ACQUSTIC RANGE | 12.2 M (40.0 FT) ARC | 131.5 SQ CM (20.36 SQ IN) - MODEL | 0. | M/SEC (0. FPS) | FREE-JET SPEED |
|-------|------------|----------------|-----------------------|------------------------------------|----|-----------------|----------------|
| 0500 | 0616 | | | | | | |

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X05165

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|-------|------|------|------|-------|-------|-------|------|------|-------|
| 50 | 71.1 | 74.1 | 76.2 | 77.7 | 80.5 | 80.7 | 83.0 | 85.7 | 89.2 | 97.2 | 100.1 | 98.1 | 96.4 | 174.7 |
| 63 | 72.4 | 75.5 | 76.8 | 79.5 | 82.1 | 82.6 | 84.0 | 86.0 | 91.3 | 100.5 | 102.1 | 98.4 | 96.4 | 176.0 |
| 80 | 74.9 | 76.8 | 80.6 | 84.1 | 83.1 | 85.9 | 88.4 | 93.6 | 102.6 | 102.7 | 98.6 | 96.9 | 97.0 | 177.0 |
| 100 | 78.9 | 78.2 | 80.6 | 82.6 | 85.6 | 84.8 | 87.3 | 90.8 | 95.6 | 103.6 | 104.1 | 98.3 | 95.8 | 177.9 |
| 125 | 93.8 | 93.4 | 88.3 | 87.1 | 88.8 | 87.6 | 88.6 | 91.8 | 97.8 | 105.3 | 105.6 | 98.0 | 95.4 | 179.4 |
| 160 | 94.5 | 94.6 | 91.5 | 90.0 | 91.6 | 89.3 | 89.3 | 93.0 | 98.2 | 104.7 | 105.0 | 96.3 | 93.1 | 179.1 |
| 200 | 95.3 | 94.8 | 96.7 | 96.0 | 93.3 | 89.3 | 91.0 | 93.7 | 98.1 | 104.4 | 102.0 | 94.0 | 91.0 | 178.4 |
| 250 | 90.1 | 93.8 | 96.0 | 98.8 | 100.1 | 92.7 | 91.9 | 94.1 | 98.2 | 104.7 | 100.2 | 91.6 | 89.1 | 178.6 |
| 315 | 90.0 | 90.6 | 93.1 | 95.7 | 100.7 | 98.6 | 94.2 | 94.2 | 97.8 | 104.0 | 98.4 | 90.5 | 86.7 | 178.3 |
| 400 | 89.0 | 90.5 | 92.5 | 94.1 | 96.2 | 97.8 | 97.9 | 96.1 | 97.7 | 101.6 | 96.2 | 88.1 | 84.2 | 177.2 |
| 500 | 86.4 | 89.2 | 91.3 | 93.7 | 95.3 | 93.9 | 97.8 | 96.9 | 97.0 | 99.8 | 94.5 | 86.3 | 81.6 | 176.4 |
| 630 | 85.1 | 87.3 | 89.9 | 92.6 | 95.5 | 94.3 | 94.7 | 97.6 | 96.3 | 99.4 | 93.5 | 85.0 | 79.4 | 176.3 |
| 800 | 83.5 | 86.3 | 88.6 | 91.8 | 94.7 | 94.7 | 94.3 | 97.0 | 95.2 | 97.7 | 91.3 | 82.5 | 77.4 | 175.7 |
| 1000 | 81.5 | 85.8 | 88.2 | 91.5 | 92.5 | 93.5 | 93.8 | 95.9 | 94.6 | 97.2 | 90.4 | 80.4 | 73.9 | 175.4 |
| 1250 | 80.5 | 84.5 | 87.0 | 89.9 | 92.1 | 92.6 | 93.3 | 94.8 | 93.2 | 95.9 | 87.9 | 78.2 | 72.0 | 175.0 |
| 1600 | 77.1 | 81.7 | 84.7 | 87.6 | 88.9 | 90.8 | 90.9 | 92.9 | 90.7 | 93.1 | 85.8 | 74.6 | 66.4 | 173.9 |
| 2000 | 74.5 | 80.5 | 83.4 | 86.3 | 88.8 | 89.5 | 89.6 | 90.8 | 88.6 | 91.4 | 83.0 | 71.7 | 61.1 | 173.8 |
| 2500 | 68.6 | 76.5 | 78.5 | 83.1 | 82.9 | 85.2 | 86.1 | 85.7 | 85.3 | 86.5 | 74.5 | 65.2 | 51.7 | 172.0 |
| 3150 | 62.0 | 69.8 | 73.8 | 77.9 | 79.1 | 81.7 | 81.1 | 80.2 | 81.8 | 80.6 | 68.0 | 56.6 | 40.8 | 171.3 |
| 4000 | 52.9 | 61.4 | 66.5 | 72.9 | 74.0 | 74.9 | 74.6 | 73.9 | 74.8 | 75.0 | 61.0 | 44.0 | 21.8 | 172.1 |
| 5000 | 38.9 | 49.0 | 56.4 | 62.7 | 61.7 | 65.8 | 65.1 | 65.0 | 63.9 | 63.2 | 47.4 | 24.9 | | 171.7 |
| 6300 | 14.9 | 28.9 | 39.0 | 45.6 | 44.9 | 49.4 | 50.2 | 47.2 | 47.8 | 43.1 | 23.4 | | | 170.4 |
| 8000 | | | | | | | | | | | | | | 170.9 |
| 10000 | | | | | | | | | | | | | | 174.0 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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OASPL 101.1 102.0 103.0 104.7 106.7 105.2 105.3 106.4 108.2 114.1 112.7 106.5 104.2 189.8
PNL 104.6 106.4 108.3 110.9 113.0 112.2 112.5 113.5 114.0 118.5 114.5 106.6 103.0
PNL 105.8 107.5 108.8 110.9 114.0 112.8 112.5 113.5 114.0 119.1 115.6 106.6 103.0

DIAMETER RATIO 8.288 FREQUENCY SHIFT -9

TEST DATE 12-15-77 TAPE NO. N281 IALPHA SB59 TAMB 39.74
LOCATION C41 ANECH CH AERO. RDG. ADH009 PAMB 29.4393 RELHUM 70.30

MODEL TEST POINT 0516 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 0. FREE-JET SPEED 0. FPS

07/19/79 17.781

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X05170
BACKGROUND FJB300-FMODL X05230

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 86.3 | 90.8 | 90.3 | 91.4 | 91.5 | 94.1 | 96.7 | 98.9 | 101.6 | 108.1 | 113.3 | 116.5 | 118.4 | 150.2 |
| 315 | 87.6 | 89.4 | 89.7 | 91.2 | 93.8 | 94.9 | 96.6 | 99.0 | 103.4 | 110.7 | 115.6 | 117.8 | 118.7 | 151.6 |
| 400 | 89.6 | 89.7 | 91.7 | 92.5 | 95.3 | 95.2 | 97.6 | 100.0 | 105.0 | 114.5 | 119.2 | 119.8 | 118.5 | 153.8 |
| 500 | 91.5 | 91.5 | 92.0 | 94.8 | 96.9 | 96.8 | 98.4 | 101.3 | 107.5 | 117.3 | 121.7 | 120.2 | 117.1 | 155.3 |
| 630 | 93.2 | 92.1 | 94.1 | 96.7 | 98.3 | 97.9 | 100.0 | 103.7 | 109.4 | 119.7 | 122.8 | 120.3 | 116.2 | 156.4 |
| 800 | 98.6 | 95.1 | 97.6 | 100.2 | 99.5 | 99.1 | 102.0 | 105.7 | 111.9 | 122.0 | 124.1 | 119.8 | 114.4 | 157.6 |
| 1000 | 107.9 | 104.7 | 105.2 | 106.5 | 104.6 | 101.5 | 103.9 | 107.8 | 113.7 | 123.0 | 125.4 | 120.4 | 113.8 | 158.9 |
| 1250 | 113.3 | 112.6 | 110.1 | 109.6 | 106.9 | 104.6 | 105.7 | 108.9 | 114.7 | 123.1 | 125.0 | 118.4 | 112.1 | 158.9 |
| 1600 | 114.6 | 114.7 | 116.2 | 114.7 | 111.3 | 106.7 | 107.1 | 110.5 | 115.3 | 124.0 | 124.7 | 117.2 | 110.2 | 159.7 |
| 2000 | 110.7 | 113.5 | 115.0 | 117.3 | 118.6 | 111.3 | 109.1 | 111.3 | 116.4 | 125.3 | 123.0 | 115.0 | 109.3 | 160.2 |
| 2500 | 110.3 | 109.6 | 111.1 | 113.2 | 118.2 | 117.7 | 113.2 | 112.7 | 116.3 | 124.5 | 121.2 | 113.9 | 108.6 | 159.5 |
| 3150 | 109.6 | 110.9 | 111.4 | 111.9 | 113.5 | 115.5 | 117.8 | 114.9 | 117.1 | 122.3 | 119.7 | 112.2 | 106.4 | 158.5 |
| 4000 | 108.6 | 109.7 | 110.3 | 111.8 | 113.6 | 111.3 | 116.1 | 116.5 | 116.9 | 120.6 | 118.0 | 110.2 | 105.0 | 157.5 |
| 5000 | 108.1 | 109.4 | 110.0 | 111.5 | 113.9 | 112.2 | 113.5 | 117.2 | 117.4 | 121.4 | 118.0 | 109.4 | 104.2 | 157.7 |
| 6300 | 107.5 | 107.6 | 108.7 | 110.4 | 113.0 | 112.9 | 113.7 | 116.9 | 116.6 | 119.8 | 115.8 | 107.9 | 103.8 | 157.0 |
| 8000 | 106.0 | 107.9 | 109.0 | 111.1 | 111.5 | 111.3 | 112.5 | 116.2 | 116.4 | 119.6 | 114.5 | 106.4 | 102.2 | 153.8 |
| 10000 | 105.2 | 106.1 | 107.8 | 109.3 | 111.2 | 111.3 | 112.7 | 115.5 | 115.0 | 118.3 | 113.6 | 105.3 | 101.7 | 156.4 |
| 12500 | 102.4 | 104.5 | 105.9 | 107.4 | 108.0 | 110.2 | 111.3 | 113.7 | 113.4 | 116.6 | 111.3 | 103.3 | 99.2 | 155.5 |
| 16000 | 101.0 | 103.3 | 104.4 | 105.8 | 105.6 | 108.0 | 109.4 | 111.8 | 111.4 | 114.4 | 109.4 | 101.5 | 96.7 | 154.8 |
| 20000 | 96.8 | 100.0 | 100.6 | 103.2 | 102.4 | 104.2 | 106.1 | 107.1 | 108.6 | 111.5 | 104.7 | 97.9 | 93.4 | 153.1 |
| 25000 | 94.3 | 96.2 | 98.2 | 99.3 | 100.7 | 102.0 | 103.0 | 103.4 | 106.0 | 108.5 | 100.5 | 93.9 | 91.6 | 152.5 |
| 31500 | 90.9 | 92.5 | 95.2 | 98.1 | 98.0 | 98.3 | 99.1 | 100.6 | 103.0 | 106.3 | 99.3 | 89.8 | 87.0 | 153.0 |
| 40000 | 86.4 | 88.1 | 90.1 | 93.7 | 90.4 | 93.5 | 94.3 | 96.5 | 98.3 | 101.8 | 94.3 | 84.7 | 81.3 | 152.2 |
| 50000 | 78.9 | 82.0 | 83.4 | 86.6 | 83.7 | 87.2 | 89.0 | 89.9 | 94.5 | 95.6 | 88.9 | 79.4 | 75.9 | 150.9 |
| 63000 | 73.0 | 76.5 | 77.8 | 80.1 | 78.5 | 80.6 | 83.7 | 83.5 | 90.7 | 90.6 | 82.6 | 74.3 | 69.7 | 151.3 |
| 80000 | 68.1 | 72.0 | 73.5 | 77.1 | 72.5 | 76.2 | 76.8 | 79.2 | 85.4 | 87.3 | 77.5 | 67.2 | 61.2 | 153.6 |
| QASPL | 120.8 | 121.3 | 122.2 | 123.2 | 124.7 | 123.4 | 124.1 | 125.7 | 127.3 | 133.8 | 133.8 | 129.3 | 126.2 | 170.6 |

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TEST DATE 12-15-77 TAPE NO. N281 ALPHA SB59 TAMB 37.58
LOCATION C41 ANECH C11 AERO. RDG. ADH014 PAH9 29.4552 RELHUM 74.90

MODEL TEST POINT 0517 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.38 SQ IN) - MODEL 84.73 M/SEC (278.0 FPS) FREZ-JET SPEED

07/19/79 17.781

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
56.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X05170

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

160

200

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

CASPL

126.0

126.0

126.0

126.0

126.0

126.0

126.0

126.0

126.0

126.0

126.0

126.0

126.0

126.0

126.0

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MODEL/FAIL SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 278.00 REFRACTION CORRECTION - YES
INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 12-15-77 TAPE NO. N281 ALPHA 8859 TAMB 37.58
LOCATION C41 ANECH CH AERO. RDG. ADH014 PAMB 29.4552 RELHUM 74.90

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
0500 0517 12.2 M (40.0 FT) ARC 131.5 SQ CH (20.38 SQ IN) - MODEL 84.73 M/SEC (278.0 FPS)

07/19/79 17.761

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB, 2400.0 FT., SL

IDENTIFICATION - FJ-300-FMODL X05175

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|-------|-------|-------|-------|-------|------|------|------|-------|-------|------|-------|-------|
| 50 | 71.7 | 74.2 | 74.8 | 77.1 | 79.2 | 78.1 | 79.3 | 80.2 | 87.8 | 96.2 | 99.0 | 96.2 | 92.1 | 172.6 |
| 63 | 73.7 | 74.5 | 76.6 | 79.4 | 80.8 | 79.7 | 80.5 | 82.3 | 89.7 | 98.7 | 100.4 | 97.1 | 92.8 | 174.1 |
| 80 | 75.5 | 76.3 | 76.9 | 81.2 | 82.2 | 80.8 | 82.0 | 84.5 | 92.1 | 100.9 | 101.8 | 97.2 | 92.7 | 175.3 |
| 100 | 77.1 | 76.8 | 79.0 | 84.3 | 83.2 | 82.1 | 83.9 | 86.2 | 94.1 | 102.2 | 103.4 | 98.5 | 93.6 | 176.9 |
| 125 | 81.0 | 78.7 | 81.7 | 90.5 | 88.1 | 84.4 | 85.7 | 88.3 | 94.9 | 102.0 | 102.7 | 96.2 | 91.5 | 176.3 |
| 160 | 91.0 | 88.6 | 89.3 | 93.7 | 90.5 | 87.5 | 87.4 | 89.2 | 95.4 | 102.6 | 102.0 | 94.3 | 88.7 | 176.5 |
| 200 | 96.4 | 96.6 | 94.3 | 99.5 | 95.2 | 89.5 | 88.7 | 90.7 | 96.4 | 103.8 | 100.1 | 91.8 | 87.1 | 177.7 |
| 250 | 99.3 | 100.0 | 101.4 | 101.5 | 102.3 | 94.1 | 90.7 | 91.4 | 96.2 | 102.9 | 98.1 | 90.4 | 86.0 | 179.4 |
| 315 | 93.3 | 97.1 | 99.0 | 97.9 | 102.1 | 100.4 | 94.7 | 92.7 | 97.1 | 100.7 | 96.6 | 88.5 | 83.3 | 178.3 |
| 400 | 94.2 | 94.4 | 96.0 | 95.7 | 96.9 | 98.0 | 99.3 | 95.0 | 97.0 | 99.1 | 94.9 | 86.4 | 81.4 | 177.2 |
| 500 | 91.2 | 93.8 | 94.8 | 95.4 | 96.9 | 93.9 | 97.7 | 96.6 | 97.5 | 99.8 | 94.7 | 85.3 | 80.0 | 177.1 |
| 630 | 89.7 | 92.2 | 93.4 | 95.0 | 97.1 | 94.8 | 95.1 | 97.3 | 97.0 | 98.5 | 92.8 | 83.8 | 79.3 | 176.8 |
| 800 | 88.5 | 90.5 | 92.8 | 93.9 | 96.4 | 95.7 | 95.6 | 97.3 | 97.3 | 98.7 | 91.6 | 82.2 | 77.0 | 177.1 |
| 1000 | 87.4 | 89.4 | 91.3 | 94.8 | 95.1 | 94.5 | 94.8 | 97.0 | 96.0 | 97.4 | 90.5 | 80.7 | 75.5 | 176.7 |
| 1250 | 85.2 | 89.2 | 91.5 | 93.2 | 95.1 | 94.9 | 95.3 | 96.5 | 94.5 | 95.6 | 88.0 | 78.1 | 71.9 | 176.6 |
| 1600 | 83.3 | 86.7 | 89.8 | 90.9 | 91.3 | 93.5 | 93.5 | 94.3 | 92.6 | 93.4 | 85.8 | 75.5 | 67.6 | 175.8 |
| 2000 | 79.0 | 83.9 | 87.0 | 89.1 | 89.1 | 91.2 | 91.5 | 92.3 | 89.8 | 90.2 | 80.5 | 70.7 | 61.6 | 174.8 |
| 2500 | 75.4 | 81.1 | 84.2 | 85.8 | 85.3 | 86.8 | 87.7 | 86.8 | 86.9 | 86.6 | 75.1 | 64.4 | 55.6 | 173.7 |
| 3150 | 67.2 | 74.8 | 77.9 | 80.3 | 82.3 | 83.3 | 83.2 | 81.6 | 82.8 | 82.7 | 71.2 | 56.1 | 43.4 | 173.4 |
| 4000 | 57.7 | 65.4 | 70.9 | 76.6 | 77.0 | 76.7 | 76.3 | 75.4 | 75.1 | 74.3 | 60.9 | 42.9 | 23.9 | 173.3 |
| 5000 | 45.5 | 54.8 | 62.0 | 66.8 | 64.4 | 67.1 | 66.5 | 66.0 | 65.5 | 61.0 | 46.1 | 24.3 | 172.7 | |
| 6300 | 22.9 | 35.8 | 44.4 | 48.9 | 47.6 | 50.9 | 51.1 | 48.6 | 50.6 | 42.7 | 22.9 | | 172.2 | |
| 8000 | | 3.9 | 15.5 | 22.4 | 23.8 | 26.6 | 27.7 | 22.9 | 25.3 | 16.0 | | | 173.2 | |
| 10000 | | | | | | | | | | | | | 171.9 | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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CASPL 103.7 104.9 106.2 107.3 108.3 106.2 105.9 106.0 107.6 112.4 110.9 105.2 100.6 189.7
PNL 108.7 110.5 112.2 113.6 114.6 113.4 113.3 113.7 114.2 117.2 112.9 105.6 100.5
PNLT 109.9 111.2 113.0 113.8 115.2 114.1 113.8 113.7 114.8 117.2 112.9 105.6 100.5

DIAMETER RATIO 8.288 FREQUENCY SHIFT -9

TEST DATE 12-15-77 TAPE NO. N281 ALPHA SB59 TAMB 37.58
LOCATION C41 ANECH CH AERO. RDG. ADH014 PAMB 29.4552 RELHUM 74.90

MODEL TEST POINT 0517 ACUSTIC RANGE 731.5 M (2400.0 FT) SL SIZE 9032.2 SQ CM (1400.00 SQ IN) - FULL FREE-JET SPEED 84.73 M/SEC (278.0 FPS)

07/19/79 17.781

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. F. 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X05180
BACKGROUND FJB400-FMODL X05220

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PHI |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 87.0 | 90.3 | 90.0 | 91.6 | 91.9 | 93.8 | 95.7 | 98.4 | 102.3 | 108.1 | 113.8 | 116.7 | 117.4 | 150.2 |
| 315 | 87.8 | 89.6 | 89.9 | 91.9 | 94.0 | 95.4 | 97.0 | 99.2 | 103.9 | 111.7 | 116.1 | 118.3 | 119.0 | 151.8 |
| 400 | 89.9 | 90.4 | 91.7 | 93.0 | 95.6 | 95.7 | 98.3 | 101.2 | 106.2 | 115.8 | 120.2 | 119.6 | 116.2 | 154.1 |
| 500 | 91.2 | 92.0 | 92.8 | 94.8 | 97.2 | 98.3 | 99.4 | 103.1 | 108.3 | 119.1 | 122.0 | 119.9 | 114.1 | 155.6 |
| 630 | 94.4 | 93.1 | 94.9 | 96.2 | 98.8 | 98.2 | 101.3 | 107.4 | 110.4 | 120.9 | 123.1 | 119.3 | 111.7 | 156.6 |
| 800 | 100.3 | 97.4 | 98.4 | 99.9 | 101.0 | 100.9 | 103.0 | 107.2 | 113.1 | 122.2 | 124.1 | 116.0 | 109.7 | 157.5 |
| 1000 | 118.2 | 113.2 | 109.0 | 108.0 | 111.4 | 104.5 | 108.9 | 111.3 | 116.5 | 126.5 | 127.7 | 118.6 | 112.3 | 161.6 |
| 1250 | 115.3 | 115.3 | 113.1 | 109.1 | 108.7 | 106.6 | 106.2 | 110.6 | 116.0 | 124.6 | 126.0 | 116.7 | 111.1 | 160.1 |
| 1600 | 113.4 | 113.9 | 115.2 | 115.0 | 112.6 | 107.9 | 107.6 | 111.5 | 116.3 | 124.0 | 124.2 | 116.0 | 110.2 | 159.5 |
| 2000 | 110.4 | 112.2 | 113.5 | 116.8 | 118.6 | 113.5 | 109.9 | 112.3 | 116.9 | 124.8 | 122.8 | 114.3 | 110.0 | 159.9 |
| 2500 | 110.6 | 105.6 | 110.4 | 111.9 | 116.7 | 117.2 | 113.7 | 113.4 | 117.0 | 124.0 | 120.9 | 113.6 | 108.6 | 159.1 |
| 3150 | 109.1 | 110.1 | 111.1 | 111.9 | 113.0 | 114.7 | 117.3 | 115.7 | 117.5 | 122.5 | 120.2 | 112.2 | 107.4 | 158.6 |
| 4000 | 107.9 | 109.0 | 109.5 | 111.3 | 113.3 | 111.3 | 115.8 | 117.0 | 116.9 | 120.9 | 118.8 | 111.0 | 106.2 | 157.8 |
| 5000 | 108.1 | 108.4 | 109.5 | 110.7 | 112.9 | 113.0 | 113.0 | 117.2 | 117.6 | 121.1 | 118.2 | 110.2 | 105.4 | 157.6 |
| 6300 | 107.2 | 107.6 | 108.2 | 110.4 | 113.0 | 112.6 | 113.7 | 116.9 | 117.3 | 120.0 | 116.6 | 108.4 | 104.5 | 157.2 |
| 8000 | 103.4 | 107.3 | 108.2 | 110.3 | 110.9 | 111.8 | 113.0 | 115.9 | 116.6 | 119.5 | 115.8 | 107.4 | 103.4 | 156.9 |
| 10000 | 101.2 | 105.6 | 106.5 | 108.8 | 110.4 | 111.3 | 112.7 | 115.5 | 115.4 | 118.5 | 114.3 | 106.8 | 102.4 | 156.5 |
| 12500 | 103.1 | 103.7 | 104.6 | 106.9 | 107.2 | 110.0 | 111.0 | 113.9 | 113.9 | 116.3 | 112.1 | 104.7 | 100.6 | 155.4 |
| 16000 | 100.7 | 103.0 | 103.8 | 106.3 | 105.3 | 108.5 | 109.1 | 112.0 | 112.4 | 115.1 | 110.4 | 103.2 | 99.1 | 155.3 |
| 20000 | 96.5 | 100.0 | 100.3 | 103.7 | 102.1 | 104.9 | 106.1 | 107.3 | 109.3 | 111.2 | 104.9 | 99.4 | 95.6 | 153.3 |
| 25000 | 93.8 | 96.1 | 97.9 | 100.0 | 100.4 | 102.5 | 103.2 | 103.0 | 107.7 | 108.1 | 101.4 | 95.5 | 93.5 | 152.9 |
| 31500 | 91.1 | 92.6 | 94.6 | 97.7 | 98.0 | 99.0 | 99.8 | 100.7 | 103.4 | 107.4 | 100.4 | 92.3 | 89.2 | 153.6 |
| 40000 | 86.4 | 87.7 | 89.5 | 93.6 | 89.6 | 94.2 | 95.3 | 96.7 | 99.2 | 102.9 | 96.2 | 86.9 | 83.7 | 153.0 |
| 50000 | 78.8 | 80.8 | 83.6 | 86.5 | 83.6 | 87.1 | 89.9 | 89.3 | 95.4 | 96.5 | 88.8 | 81.6 | 77.8 | 151.5 |
| 63000 | 74.6 | 75.6 | 79.3 | 81.0 | 78.9 | 81.3 | 85.4 | 83.9 | 91.4 | 91.0 | 83.0 | 76.2 | 72.2 | 151.9 |
| 80000 | 70.5 | 71.6 | 75.9 | 78.5 | 74.7 | 77.1 | 77.9 | 79.3 | 85.3 | 88.4 | 79.4 | 68.3 | 64.1 | 154.4 |
| GASPL | 122.6 | 121.8 | 121.8 | 122.9 | 124.5 | 123.5 | 124.1 | 126.1 | 128.0 | 134.4 | 134.4 | 128.6 | 124.6 | 171.0 |

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TEST DATE 12-15-77 TAPE NO. N281 IALPHA SB59 TAMB 36.14
LOCATION C41 ANECH CH AERO. RDG. ADH023 PAH3 29.4513 RELHUM 79.30

MODEL TEST POINT 0518 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 131.5 SQ CH (20.36 SQ IN) - MODEL 112.78 M/SEC (370.0 FPS) FREE-JET SPEED

07/19/79 17.761

408

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG F 70 PERCENT R.H. STD. DAY, SR 40.0 FT. ARC.

IDENTIFICATION - FJ-400-FMODL X05180

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 93.9 | 98.0 | 94.4 | 94.5 | 93.4 | 93.8 | 94.9 | 96.0 | 100.7 | 107.6 | 111.5 | 114.1 | 115.5 | 148.2 |
| 315 | 93.9 | 96.0 | 94.4 | 94.5 | 95.7 | 95.8 | 95.8 | 95.8 | 104.3 | 113.2 | 117.3 | 117.5 | 116.5 | 151.9 |
| 400 | 94.9 | 95.5 | 94.4 | 95.1 | 97.3 | 95.9 | 97.6 | 99.5 | 106.3 | 116.7 | 119.7 | 119.1 | 116.6 | 154.0 |
| 500 | 96.9 | 96.3 | 96.3 | 96.1 | 98.9 | 98.5 | 98.5 | 101.1 | 108.4 | 118.5 | 120.9 | 119.0 | 115.9 | 154.9 |
| 630 | 98.2 | 97.9 | 97.4 | 98.0 | 100.5 | 98.7 | 100.3 | 102.5 | 111.4 | 122.3 | 118.8 | 116.3 | 115.1 | |
| 800 | 101.4 | 99.0 | 99.5 | 99.4 | 102.4 | 101.3 | 102.1 | 105.0 | 115.0 | 124.8 | 126.4 | 120.5 | 121.1 | 160.1 |
| 1000 | 104.9 | 101.3 | 101.5 | 102.2 | 113.8 | 105.0 | 108.0 | 109.2 | 114.7 | 123.1 | 125.0 | 118.9 | 120.3 | 159.1 |
| 1250 | 127.8 | 121.2 | 115.2 | 112.4 | 110.4 | 107.2 | 105.5 | 108.7 | 115.4 | 122.8 | 123.5 | 118.4 | 119.7 | 161.7 |
| 1600 | 122.1 | 121.0 | 117.5 | 114.3 | 108.8 | 107.1 | 109.8 | 116.1 | 123.7 | 122.2 | 116.8 | 119.5 | 160.4 | |
| 2000 | 119.1 | 118.6 | 118.8 | 117.6 | 121.0 | 114.4 | 109.6 | 110.8 | 116.5 | 123.1 | 120.6 | 116.4 | 118.3 | 160.6 |
| 2500 | 117.4 | 118.2 | 118.4 | 120.4 | 119.9 | 118.6 | 113.8 | 112.2 | 117.5 | 122.1 | 120.3 | 115.3 | 117.4 | 160.7 |
| 3150 | 120.1 | 117.7 | 116.9 | 116.7 | 115.9 | 116.4 | 117.7 | 114.9 | 117.5 | 121.2 | 119.6 | 115.0 | 117.2 | 160.0 |
| 4000 | 116.0 | 116.2 | 116.2 | 115.9 | 116.6 | 113.5 | 117.0 | 116.9 | 118.5 | 121.6 | 119.0 | 113.7 | 115.3 | 159.6 |
| 5000 | 114.8 | 115.1 | 114.7 | 115.5 | 116.6 | 115.7 | 114.6 | 117.5 | 118.4 | 120.7 | 117.5 | 112.1 | 114.6 | 159.1 |
| 6300 | 114.9 | 114.6 | 114.8 | 115.1 | 116.9 | 115.6 | 115.5 | 117.3 | 117.9 | 120.3 | 116.8 | 111.2 | 113.7 | 159.2 |
| 8000 | 113.9 | 113.7 | 113.4 | 114.8 | 114.9 | 114.8 | 114.8 | 116.3 | 116.9 | 119.5 | 115.6 | 110.8 | 112.9 | 158.6 |
| 10000 | 111.9 | 113.2 | 113.3 | 114.6 | 114.4 | 114.3 | 114.5 | 116.0 | 115.7 | 117.7 | 113.7 | 109.1 | 111.4 | 158.2 |
| 12500 | 111.4 | 111.2 | 111.4 | 112.8 | 111.1 | 113.0 | 112.8 | 114.4 | 114.7 | 117.0 | 112.5 | 108.1 | 110.4 | 157.6 |
| 16000 | 108.8 | 108.8 | 109.0 | 110.4 | 109.3 | 111.5 | 110.9 | 112.6 | 112.1 | 113.5 | 107.5 | 104.7 | 107.3 | 156.4 |
| 20000 | 106.0 | 107.7 | 107.8 | 109.4 | 106.0 | 107.9 | 108.0 | 107.8 | 111.1 | 111.1 | 104.6 | 101.5 | 105.9 | 155.8 |
| 25000 | 101.2 | 104.1 | 103.6 | 106.1 | 104.3 | 105.5 | 105.1 | 103.6 | 107.5 | 111.0 | 104.3 | 98.9 | 102.3 | 155.6 |
| 31500 | 97.7 | 99.4 | 100.4 | 101.7 | 101.9 | 102.0 | 101.6 | 101.2 | 104.2 | 107.3 | 100.9 | 94.3 | 97.6 | 155.2 |
| 40000 | 94.2 | 95.1 | 96.3 | 98.6 | 94.0 | 97.2 | 97.1 | 100.8 | 101.3 | 93.9 | 89.5 | 92.1 | 154.4 | |
| 50000 | 91.6 | 91.9 | 92.4 | 95.1 | 88.1 | 90.1 | 91.8 | 89.9 | 97.8 | 96.8 | 89.1 | 85.1 | 87.5 | 154.5 |
| 63000 | 82.9 | 83.8 | 85.5 | 87.0 | 82.6 | 84.3 | 87.3 | 84.5 | 93.0 | 95.7 | 86.9 | 78.6 | 80.8 | 155.3 |
| 80000 | 74.9 | 75.2 | 78.1 | 79.1 | 78.6 | 80.1 | 79.7 | 79.7 | 83.2 | 85.9 | 77.1 | 68.8 | 71.0 | 153.7 |
| GASPL | 130.7 | 128.1 | 126.7 | 126.7 | 127.5 | 125.6 | 125.2 | 125.9 | 128.3 | 133.6 | 133.4 | 129.1 | 129.7 | 172.1 |

MODEL/FULL SIZE SCALE FACTOR FREE JET VELOCITY (JET/SEC) 320.00 REACTION CORRECTION - YES
INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 12-15-77 TAPE NO. N281 ALPHA 8859 TAMB 36.14
LOCATION C41 ANECH CH AERO. RD9. ADH023 PAMB 29.4513 RELHUM 79.30

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
0500 0518 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.38 SQ IN) - MODEL 112.78 M/SEC (370.0 FPS)

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07/19/78 17.781

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X05185

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|------|-------|-------|-------|------|------|------|-------|-------|------|------|-------|
| 50 | 73.8 | 76.0 | 78.0 | 77.3 | 79.8 | 78.7 | 80.2 | 81.8 | 87.9 | 97.2 | 98.6 | 95.8 | 80.0 | 172.4 |
| 63 | 75.8 | 76.7 | 77.8 | 78.4 | 81.5 | 81.3 | 81.1 | 83.3 | 89.9 | 98.9 | 99.7 | 95.7 | 89.3 | 173.3 |
| 80 | 77.1 | 78.3 | 78.8 | 80.2 | 83.2 | 81.5 | 82.9 | 84.7 | 92.8 | 100.4 | 101.1 | 95.4 | 89.5 | 174.4 |
| 100 | 80.2 | 79.3 | 80.9 | 81.5 | 85.0 | 84.0 | 84.7 | 87.2 | 96.5 | 105.1 | 105.2 | 97.0 | 94.1 | 178.5 |
| 125 | 83.5 | 81.5 | 82.9 | 84.3 | 86.3 | 87.6 | 90.5 | 91.3 | 96.1 | 103.4 | 103.7 | 95.2 | 93.1 | 177.4 |
| 160 | 106.2 | 101.3 | 96.4 | 94.3 | 92.8 | 89.8 | 87.9 | 90.6 | 96.6 | 102.8 | 102.0 | 94.5 | 92.1 | 180.1 |
| 200 | 100.3 | 100.9 | 98.6 | 94.0 | 96.5 | 91.2 | 89.3 | 91.6 | 97.1 | 103.6 | 100.4 | 92.6 | 91.5 | 178.8 |
| 250 | 97.0 | 98.2 | 99.6 | 99.2 | 103.0 | 96.6 | 91.6 | 92.4 | 97.3 | 102.7 | 98.5 | 91.7 | 89.7 | 179.0 |
| 315 | 94.9 | 97.5 | 98.9 | 101.7 | 101.6 | 100.5 | 95.5 | 93.5 | 98.0 | 101.4 | 97.7 | 90.1 | 88.0 | 179.1 |
| 400 | 97.1 | 96.6 | 97.1 | 97.7 | 97.3 | 98.0 | 99.2 | 95.9 | 97.7 | 100.1 | 96.6 | 89.1 | 86.7 | 178.4 |
| 500 | 92.5 | 94.7 | 96.0 | 96.6 | 97.8 | 94.8 | 98.1 | 97.5 | 98.3 | 100.0 | 95.5 | 87.2 | 83.9 | 177.9 |
| 630 | 90.8 | 93.2 | 94.2 | 95.8 | 97.5 | 96.8 | 95.5 | 97.9 | 97.9 | 98.8 | 93.5 | 84.9 | 82.2 | 177.5 |
| 800 | 90.4 | 92.3 | 94.0 | 95.2 | 97.6 | 96.5 | 96.1 | 97.4 | 97.1 | 98.0 | 92.3 | 83.4 | 80.0 | 177.5 |
| 1000 | 89.0 | 91.1 | 92.4 | 94.8 | 95.4 | 95.5 | 95.3 | 96.3 | 95.9 | 96.9 | 90.7 | 82.3 | 78.1 | 176.9 |
| 1250 | 86.5 | 90.3 | 92.0 | 94.3 | 94.7 | 94.8 | 94.9 | 95.8 | 94.4 | 94.7 | 88.2 | 79.7 | 75.2 | 176.6 |
| 1600 | 85.1 | 87.7 | 89.7 | 92.3 | 91.2 | 93.3 | 92.9 | 93.9 | 93.0 | 93.4 | 86.2 | 77.4 | 71.8 | 175.9 |
| 2000 | 81.6 | 84.7 | 86.9 | 89.6 | 89.2 | 91.6 | 90.9 | 91.7 | 90.0 | 89.3 | 80.2 | 72.4 | 65.7 | 174.8 |
| 2500 | 76.9 | 82.4 | 84.8 | 87.9 | 85.4 | 87.5 | 87.3 | 86.4 | 88.1 | 85.7 | 75.5 | 66.4 | 59.4 | 174.1 |
| 3150 | 68.8 | 76.3 | 78.7 | 83.1 | 82.3 | 83.8 | 83.0 | 80.6 | 82.6 | 83.2 | 71.8 | 58.7 | 47.3 | 174.0 |
| 4000 | 59.0 | 66.9 | 71.8 | 75.4 | 76.9 | 77.4 | 76.6 | 74.9 | 75.5 | 74.8 | 62.3 | 45.3 | 28.2 | 173.6 |
| 5000 | 45.8 | 55.0 | 61.4 | 66.8 | 64.1 | 67.7 | 67.1 | 65.4 | 65.9 | 61.2 | 45.5 | 26.7 | 0.9 | 172.8 |
| 6300 | 25.4 | 37.6 | 45.4 | 52.6 | 48.0 | 50.8 | 51.7 | 47.3 | 50.8 | 42.5 | 22.9 | | | 172.9 |
| 8000 | 4.7 | 17.2 | 25.3 | 24.6 | 27.2 | 29.1 | 22.8 | 24.7 | 16.5 | | | | | 173.7 |
| 10000 | | | | | | | | | | | | | | 172.1 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GASPL 108.6 107.3 106.6 107.5 106.9 106.9 106.1 106.3 106.3 113.0 111.5 104.6 101.2 190.4
PNL 111.9 111.7 112.4 114.3 115.0 113.9 113.5 113.7 114.7 117.3 113.6 105.6 102.6
PNLT 114.3 113.4 113.3 115.1 116.2 114.5 114.2 113.7 115.3 117.6 113.6 105.6 102.6

DIAMETER RATIO 8.288 FREQUENCY SHIFT -9

TEST DATE 12-15-77 TAPE NO. N261 ALPHA SB59 TAMB 36.14
LOCATION C41 ANECH CH AERO, RDG, ADH023 PAMB 29.4513 RELNUM 79.30

MODEL TEST POINT 0518 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CH (1400.00 SQ IN) - FULL 112.78 N/SEC (370.0 FPS)
FREE-JET SPEED

07/19/79 17.701

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X05190
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

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MODEL TEST POINT 0519 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.36 SQ IN) - MODEL SIZE 0. M/SEC (0. FPS) FREE-JET SPEED

TEST DATE 12-15-77 TAPE NO. N281 IALPHA SB59 TAMB 41.36
LOCATION C41 ANECH CH AERG. RDG. ADH003 PAMB 29.4523 RELHUM 68.20

07/19/79 17.791

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F. 70 PERCENT R.H. STD. DAY, SR 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X05190

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1500

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

10000000

12500000

16000000

20000000

25000000

31500000

40000000

50000000

63000000

80000000

100000000

125000000

160000000

200000000

250000000

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MODEL/FULL SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 0 REFRACCTION CORRECTION - YES
INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 12-15-77 TAPE NO. N281 ALPHA SR59 TAMP 41.38
LOCATION C41 ANECH CH AERO. RDG. ADH003 PAMB 29.4523 RELHUM 68.20

MODEL TEST POINT 0519 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.38 SQ IN) - MODEL 0. M/SEC (0. FPS)
ACQUSTIC RANGE SIZE
FREE-JET SPEED

07/19/79 17.781

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X05195

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 50 | 53.3 | 58.4 | 61.0 | 62.2 | 64.7 | 65.5 | 67.5 | 69.2 | 71.0 | 76.2 | 78.6 | 78.6 | 76.4 | 154.4 |
| 63 | 55.4 | 60.2 | 61.3 | 63.8 | 66.3 | 67.6 | 67.8 | 69.5 | 71.5 | 77.5 | 79.9 | 79.6 | 76.9 | 155.4 |
| 80 | 55.4 | 60.5 | 62.4 | 65.1 | 68.1 | 67.6 | 69.6 | 71.4 | 72.9 | 77.8 | 80.7 | 80.4 | 77.4 | 156.2 |
| 100 | 58.6 | 60.7 | 63.3 | 66.3 | 68.8 | 68.6 | 70.6 | 73.3 | 74.3 | 78.1 | 80.6 | 79.1 | 76.3 | 155.8 |
| 125 | 60.3 | 64.2 | 65.3 | 66.8 | 70.1 | 69.3 | 71.1 | 73.1 | 75.1 | 77.8 | 78.6 | 77.5 | 75.1 | 154.9 |
| 160 | 58.5 | 64.1 | 65.0 | 67.5 | 70.8 | 70.6 | 71.8 | 73.5 | 74.9 | 76.7 | 77.2 | 74.3 | 72.6 | 153.7 |
| 200 | 59.3 | 61.8 | 64.7 | 67.2 | 69.8 | 70.3 | 71.5 | 73.7 | 74.9 | 75.6 | 75.2 | 71.8 | 69.0 | 152.5 |
| 250 | 58.6 | 62.8 | 64.0 | 66.6 | 70.1 | 69.7 | 71.4 | 73.3 | 74.7 | 75.7 | 73.2 | 68.9 | 65.1 | 151.7 |
| 315 | 58.8 | 61.6 | 63.1 | 65.7 | 69.5 | 69.4 | 71.2 | 73.2 | 73.8 | 74.7 | 70.9 | 66.2 | 61.7 | 151.0 |
| 400 | 57.3 | 61.7 | 63.5 | 66.4 | 69.9 | 69.3 | 71.2 | 72.9 | 73.7 | 72.8 | 69.7 | 63.8 | 59.2 | 150.6 |
| 500 | 56.1 | 60.2 | 62.6 | 65.2 | 67.8 | 67.9 | 70.5 | 71.9 | 72.5 | 70.6 | 67.5 | 61.0 | 56.1 | 149.5 |
| 630 | 55.8 | 59.3 | 61.9 | 64.8 | 67.8 | 67.5 | 69.7 | 70.8 | 71.6 | 70.2 | 66.2 | 59.7 | 53.4 | 149.2 |
| 800 | 54.0 | 58.6 | 60.8 | 64.2 | 67.2 | 67.5 | 68.6 | 70.2 | 70.5 | 68.2 | 63.6 | 57.0 | 50.7 | 148.5 |
| 1000 | 52.0 | 57.7 | 60.4 | 63.8 | 64.5 | 66.7 | 67.6 | 69.1 | 68.8 | 67.7 | 62.1 | 54.6 | 47.9 | 147.9 |
| 1250 | 50.8 | 55.5 | 59.0 | 62.1 | 64.1 | 65.4 | 66.6 | 68.8 | 67.4 | 65.6 | 59.9 | 52.0 | 44.5 | 147.5 |
| 1600 | 48.9 | 53.5 | 56.0 | 59.6 | 60.9 | 63.3 | 64.6 | 65.9 | 65.0 | 61.9 | 56.1 | 48.3 | 38.6 | 145.9 |
| 2000 | 43.8 | 51.1 | 54.7 | 57.9 | 57.8 | 61.3 | 62.4 | 64.1 | 61.9 | 59.4 | 52.3 | 44.0 | 32.9 | 145.2 |
| 2500 | 37.7 | 46.6 | 49.6 | 53.9 | 54.2 | 57.3 | 58.7 | 58.8 | 57.9 | 54.6 | 46.6 | 36.5 | 23.8 | 143.3 |
| 3150 | 31.2 | 39.7 | 44.4 | 48.3 | 50.5 | 52.9 | 53.2 | 51.9 | 52.4 | 47.5 | 38.9 | 27.2 | 11.9 | 141.6 |
| 4000 | 21.9 | 30.9 | 37.2 | 43.4 | 44.7 | 45.8 | 46.3 | 45.4 | 44.5 | 41.0 | 29.2 | 12.9 | 141.5 | |
| 5000 | 7.4 | 18.0 | 25.2 | 32.5 | 31.6 | 35.5 | 35.8 | 35.3 | 32.7 | 27.2 | 14.1 | 139.8 | | |
| 6300 | | | 6.3 | 14.3 | 15.9 | 18.7 | 20.2 | 16.9 | 15.6 | 4.9 | | 137.6 | | |
| 8000 | | | | | | | | | | | | 136.8 | | |
| 10000 | | | | | | | | | | | | 137.6 | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |
| OASPL | 68.9 | 72.9 | 74.6 | 77.5 | 80.2 | 80.4 | 82.0 | 83.6 | 84.8 | 86.9 | 87.9 | 86.7 | 84.1 | 164.6 |
| PWL | 71.8 | 76.8 | 79.1 | 82.3 | 84.7 | 85.5 | 87.1 | 88.7 | 89.2 | 89.2 | 87.7 | 84.3 | 80.3 | |
| PWL | 71.8 | 76.8 | 79.1 | 82.3 | 84.7 | 85.5 | 87.1 | 88.7 | 89.2 | 89.2 | 87.7 | 84.3 | 80.3 | |

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DIAMETER RATIO 8.288 FREQUENCY SHIFT -9

TEST DATE 12-15-77 TAPE NO. N281 ALPHA SB59 TAMB 41.36
LOCATION C41 ANECH CH AERO. RDG. ADH003 PAMB 29.4523 RELHUM 68.20

MODEL TEST POINT 0519 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS) FREE-JET SPEED

07/19/79 17.781

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DB F, 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FM0DL X05200
BACKGROUND FJB300-FM0DL X05230

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PW

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|
| 50 | 50.5 | 70.4 | 71.8 | 72.8 | 74.2 | 76.7 | 78.4 | 80.7 | 86.3 | 90.3 | 92.7 | 93.4 | 126.7 | |
| 63 | 68.6 | 71.5 | 72.2 | 73.8 | 75.2 | 76.0 | 77.5 | 78.8 | 81.8 | 86.7 | 91.1 | 93.3 | 93.0 | 127.2 |
| 80 | 70.5 | 72.8 | 73.5 | 74.8 | 76.6 | 77.0 | 78.3 | 80.8 | 83.6 | 90.2 | 94.1 | 91.0 | 128.7 | |
| 100 | 72.5 | 74.2 | 73.9 | 76.2 | 78.8 | 79.2 | 79.8 | 82.0 | 84.7 | 91.3 | 95.2 | 93.9 | 88.1 | 129.3 |
| 125 | 76.0 | 74.8 | 75.3 | 77.1 | 80.2 | 79.3 | 81.2 | 83.6 | 86.3 | 91.9 | 96.1 | 94.0 | 84.9 | 129.9 |
| 150 | 75.0 | 74.3 | 76.1 | 78.4 | 80.7 | 80.6 | 82.2 | 85.6 | 87.6 | 92.5 | 95.8 | 91.3 | 82.2 | 129.7 |
| 200 | 75.1 | 75.7 | 76.4 | 78.0 | 81.6 | 81.4 | 83.3 | 85.5 | 88.2 | 92.3 | 94.2 | 88.4 | 80.5 | 128.9 |
| 250 | 75.0 | 76.8 | 77.3 | 79.6 | 82.4 | 82.0 | 83.9 | 86.6 | 88.2 | 91.1 | 93.8 | 85.4 | 81.3 | 128.5 |
| 315 | 76.1 | 75.1 | 77.4 | 79.2 | 82.0 | 82.1 | 83.5 | 86.4 | 88.6 | 90.5 | 91.5 | 83.7 | 78.4 | 127.7 |
| 400 | 75.2 | 76.2 | 77.0 | 79.0 | 82.3 | 82.3 | 83.8 | 86.5 | 88.4 | 90.3 | 90.0 | 81.7 | 77.0 | 127.3 |
| 500 | 75.8 | 75.3 | 77.1 | 79.4 | 82.4 | 82.1 | 83.9 | 86.4 | 87.5 | 90.2 | 88.2 | 80.1 | 75.4 | 126.8 |
| 630 | 75.5 | 76.6 | 77.6 | 79.4 | 82.5 | 82.7 | 84.5 | 86.7 | 87.5 | 88.2 | 86.7 | 78.6 | 74.6 | 126.3 |
| 800 | 75.1 | 75.7 | 76.5 | 78.7 | 81.1 | 81.2 | 83.8 | 86.4 | 87.1 | 85.0 | 77.4 | 75.2 | 125.3 | |
| 1000 | 74.3 | 75.4 | 75.9 | 78.2 | 81.3 | 81.5 | 83.2 | 85.7 | 86.8 | 84.7 | 76.1 | 73.1 | 125.2 | |
| 1250 | 74.0 | 74.9 | 75.4 | 77.9 | 81.0 | 81.4 | 82.7 | 85.1 | 85.5 | 82.8 | 75.3 | 73.3 | 124.7 | |
| 1500 | 72.5 | 74.6 | 75.7 | 77.5 | 78.9 | 80.5 | 81.8 | 83.9 | 84.4 | 85.0 | 81.3 | 74.1 | 70.4 | 124.0 |
| 2000 | 71.4 | 73.4 | 74.3 | 76.1 | 78.7 | 79.8 | 80.7 | 83.5 | 82.9 | 83.3 | 79.5 | 73.0 | 69.9 | 123.5 |
| 2500 | 68.4 | 71.0 | 72.1 | 74.4 | 75.7 | 77.7 | 79.2 | 81.4 | 80.9 | 80.1 | 76.8 | 70.7 | 67.1 | 122.0 |
| 3150 | 66.7 | 69.5 | 70.8 | 73.0 | 72.8 | 75.9 | 77.3 | 79.3 | 78.3 | 77.6 | 74.9 | 68.9 | 64.8 | 121.3 |
| 4000 | 62.2 | 66.4 | 66.7 | 69.6 | 69.5 | 71.8 | 74.3 | 75.0 | 75.0 | 74.4 | 70.3 | 64.3 | 60.6 | 119.4 |
| 5000 | 59.2 | 61.8 | 63.8 | 65.9 | 67.1 | 69.4 | 70.1 | 70.0 | 71.8 | 69.8 | 65.6 | 60.2 | 58.6 | 117.9 |
| 6300 | 55.8 | 58.3 | 60.8 | 63.6 | 64.6 | 65.1 | 65.9 | 66.6 | 67.3 | 67.0 | 62.8 | 55.6 | 53.5 | 117.5 |
| 8000 | 51.0 | 53.8 | 55.1 | 58.5 | 56.4 | 60.0 | 60.6 | 61.5 | 62.3 | 61.0 | 57.8 | 50.2 | 48.2 | 116.0 |
| 10000 | 43.4 | 46.6 | 48.4 | 51.8 | 49.4 | 52.5 | 54.8 | 54.2 | 57.0 | 53.0 | 50.3 | 43.8 | 41.9 | 113.7 |
| 12500 | 37.8 | 40.7 | 42.2 | 44.3 | 43.8 | 45.9 | 48.4 | 47.0 | 50.9 | 44.6 | 44.0 | 38.2 | 35.2 | 112.5 |
| 15000 | 32.5 | 36.2 | 37.1 | 39.7 | 39.0 | 40.1 | 41.2 | 40.3 | 42.8 | 38.7 | 37.9 | 28.8 | 26.8 | 112.8 |
| ASPI | 86.6 | 87.4 | 88.3 | 90.3 | 93.0 | 93.3 | 94.9 | 97.3 | 98.8 | 101.9 | 104.1 | 101.7 | 98.5 | 140.0 |

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TEST DATE 12-15-77 TAPE NO. N281 ALPHA SB59 TAMB 36.14
LOCATION C41 ANECH CH AERO. RDG. ADH016 PAMB 29.4572 RELHUM 77.20

MODEL TEST POINT 0520 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.38 SQ IN) - MODEL 84.73 M/SEC (278.0 FPS) FREE-JET SPEED

07/19/79 17.761

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X05200

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

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GASPL 91.9 92.0 92.1 93.4 95.1 94.4 95.2 96.7 98.4 100.6 102.5 100.4 98.5 139.8

MODEL/FULL SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 278.00 REFRACTION CORRECTION - YES
INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 12-15-77 TAPE NO. N281 JALPHA SB59 JAMB 38.14
LOCATION C41 ANECH CH AERO. RDG. ADH016 PAMB 29.4572 RELHUM 77.20

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
0500 0520 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.38 SQ IN) - MODEL 84.73 M/SEC (278.0 FPS)

07/19/78 17.781

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG F, 70 PERCENT R.H., STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X05205

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 52.7 | 56.3 | 57.1 | 59.4 | 60.5 | 59.9 | 60.4 | 61.7 | 64.6 | 69.8 | 72.2 | 69.8 | 63.2 | 145.3 |
| 63 | 54.6 | 57.6 | 58.2 | 60.8 | 62.7 | 62.1 | 61.7 | 62.6 | 66.2 | 70.4 | 73.1 | 70.3 | 61.2 | 147.0 |
| 80 | 56.5 | 58.9 | 58.8 | 61.7 | 64.1 | 62.2 | 63.0 | 64.1 | 67.6 | 71.0 | 73.1 | 68.1 | 60.0 | 146.9 |
| 100 | 59.9 | 59.5 | 60.1 | 62.8 | 64.6 | 63.5 | 64.0 | 66.0 | 68.4 | 71.1 | 71.7 | 65.9 | 59.8 | 146.5 |
| 125 | 58.9 | 58.9 | 60.9 | 62.5 | 65.4 | 64.4 | 65.1 | 65.8 | 68.4 | 69.9 | 71.3 | 63.0 | 60.6 | 146.2 |
| 160 | 59.8 | 60.1 | 61.1 | 64.0 | 66.2 | 64.9 | 65.6 | 66.9 | 68.6 | 69.1 | 68.6 | 60.6 | 56.5 | 145.5 |
| 200 | 58.4 | 61.0 | 61.8 | 63.5 | 65.8 | 65.0 | 65.2 | 66.6 | 68.4 | 68.9 | 67.1 | 58.5 | 54.8 | 145.2 |
| 250 | 59.2 | 59.1 | 61.7 | 63.2 | 66.0 | 65.1 | 65.5 | 66.7 | 67.6 | 68.7 | 65.2 | 56.7 | 52.8 | 145.0 |
| 315 | 57.8 | 59.9 | 61.0 | 63.4 | 65.9 | 64.8 | 65.6 | 66.5 | 67.7 | 66.8 | 63.7 | 55.1 | 51.7 | 144.7 |
| 400 | 57.9 | 58.6 | 60.8 | 63.2 | 65.8 | 65.3 | 66.1 | 66.9 | 66.6 | 65.7 | 61.9 | 53.7 | 51.7 | 144.7 |
| 500 | 57.1 | 59.5 | 61.1 | 62.4 | 64.3 | 63.8 | 65.7 | 66.0 | 66.6 | 65.5 | 61.6 | 52.2 | 49.1 | 144.6 |
| 630 | 56.2 | 58.2 | 59.6 | 61.7 | 64.6 | 64.1 | 65.0 | 66.0 | 66.1 | 64.4 | 59.9 | 51.4 | 48.9 | 144.5 |
| 800 | 54.8 | 57.5 | 58.8 | 62.2 | 64.7 | 64.1 | 64.8 | 65.6 | 65.4 | 64.3 | 58.5 | 50.0 | 45.3 | 144.6 |
| 1000 | 55.7 | 58.1 | 59.2 | 62.5 | 63.7 | 64.1 | 64.9 | 64.1 | 62.5 | 56.6 | 48.5 | 43.9 | 44.2 | |
| 1250 | 51.7 | 55.9 | 58.2 | 60.7 | 63.0 | 63.3 | 63.3 | 64.6 | 62.2 | 59.4 | 53.7 | 45.8 | 40.1 | 143.8 |
| 1600 | 51.3 | 55.4 | 57.4 | 58.6 | 59.7 | 61.0 | 61.5 | 62.2 | 59.8 | 56.8 | 51.5 | 43.2 | 36.0 | 142.9 |
| 2000 | 46.8 | 51.9 | 54.4 | 57.0 | 56.8 | 59.1 | 59.5 | 59.9 | 56.5 | 53.4 | 46.5 | 37.4 | 29.2 | 141.9 |
| 2500 | 42.9 | 48.8 | 51.8 | 53.0 | 52.8 | 54.5 | 55.9 | 54.9 | 53.1 | 48.3 | 40.5 | 31.1 | 23.0 | 140.4 |
| 3150 | 34.5 | 42.7 | 45.2 | 47.7 | 49.0 | 50.7 | 50.3 | 48.4 | 47.4 | 43.8 | 35.1 | 22.3 | 10.2 | 139.1 |
| 4000 | 24.4 | 32.6 | 37.7 | 42.2 | 43.5 | 43.5 | 43.2 | 41.7 | 39.5 | 33.9 | 24.8 | 8.8 | | 138.5 |
| 5000 | 10.4 | 20.6 | 27.6 | 31.6 | 30.3 | 32.6 | 32.9 | 31.2 | 28.3 | 18.8 | 8.0 | | | 137.0 |
| 6300 | 1.6 | 9.4 | 14.1 | 13.2 | 16.2 | 16.9 | 13.1 | 11.2 | | | | | | 135.1 |
| 8000 | | | | | | | | | | | | | | 133.6 |
| 10000 | | | | | | | | | | | | | | 133.1 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| QASPL | 69.1 | 70.8 | 72.1 | 74.4 | 76.8 | 76.0 | 76.6 | 77.6 | 78.8 | 80.0 | 80.4 | 75.6 | 69.0 | 157.8 |
| PNL | 72.8 | 76.0 | 77.9 | 80.1 | 81.7 | 82.0 | 82.6 | 83.2 | 82.8 | 82.2 | 79.4 | 71.2 | 68.0 | |
| PNLT | 72.8 | 76.0 | 77.9 | 80.1 | 81.7 | 82.0 | 82.6 | 83.2 | 82.8 | 82.2 | 79.4 | 71.2 | 68.0 | |

DIAMETER RATIO 8.288 FREQUENCY SHIFT -9

TEST DATE 12-15-77 TAPE NO. N281 ALPHA SB59 TAMB 36.14
LOCATION C41 ANECH CH AERO. RDG. ADH016 PAW3 29.4572 RELHUM 77.20

MODEL TEST POINT 0500 ACCUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 84.73 M/SEC (278.0 FPS)

07/19/79 17.761

416

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X05210
BACKGROUND, FJB400-FMODL X05220

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|------|------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 67.0 | 68.9 | 69.3 | 71.2 | 70.9 | 72.8 | 74.1 | 78.5 | 79.6 | 84.9 | 88.1 | 90.9 | 92.3 | 125.3 |
| 315 | 68.2 | 70.1 | 71.0 | 73.4 | 73.4 | 73.6 | 75.5 | 76.8 | 80.1 | 85.7 | 89.5 | 91.5 | 91.2 | 125.5 |
| 400 | 70.1 | 71.7 | 71.9 | 73.8 | 75.2 | 75.2 | 77.3 | 79.4 | 81.7 | 88.9 | 92.1 | 91.5 | 88.9 | 126.7 |
| 500 | 72.8 | 72.7 | 72.8 | 74.5 | 77.4 | 77.6 | 78.3 | 80.3 | 83.3 | 90.2 | 93.4 | 90.4 | 85.4 | 127.3 |
| 630 | 81.5 | 74.1 | 74.1 | 76.0 | 78.7 | 77.9 | 80.4 | 81.6 | 84.6 | 90.6 | 93.5 | 89.2 | 85.8 | 127.6 |
| 800 | 73.8 | 73.1 | 75.1 | 76.8 | 79.6 | 78.6 | 81.3 | 83.6 | 85.7 | 90.6 | 93.1 | 86.1 | 85.1 | 127.3 |
| 1000 | 73.8 | 74.2 | 75.8 | 76.8 | 80.1 | 79.7 | 82.0 | 84.5 | 87.1 | 90.0 | 91.6 | 83.9 | 82.3 | 126.8 |
| 1250 | 73.1 | 75.7 | 76.2 | 77.4 | 81.5 | 80.9 | 82.4 | 85.2 | 87.1 | 89.3 | 91.0 | 81.7 | 81.1 | 126.5 |
| 1600 | 74.9 | 73.9 | 76.4 | 77.6 | 80.5 | 80.9 | 82.3 | 85.8 | 87.5 | 88.9 | 89.2 | 80.7 | 78.8 | 126.2 |
| 2000 | 73.5 | 75.3 | 75.7 | 77.7 | 81.0 | 80.5 | 82.6 | 85.1 | 87.3 | 89.0 | 87.2 | 79.0 | 79.0 | 125.7 |
| 2500 | 73.9 | 73.9 | 75.9 | 77.6 | 80.5 | 81.1 | 82.4 | 85.5 | 86.9 | 88.6 | 85.8 | 78.1 | 76.3 | 125.4 |
| 3150 | 73.4 | 74.4 | 76.1 | 77.6 | 80.3 | 81.1 | 83.2 | 85.7 | 87.1 | 86.6 | 84.0 | 76.9 | 77.4 | 125.0 |
| 4000 | 72.5 | 74.0 | 74.7 | 77.2 | 79.8 | 79.7 | 82.2 | 84.7 | 86.2 | 85.4 | 82.8 | 75.4 | 76.5 | 124.0 |
| 5000 | 72.2 | 73.2 | 74.7 | 76.3 | 78.7 | 79.4 | 82.1 | 83.8 | 85.3 | 85.3 | 82.0 | 74.5 | 73.9 | 123.6 |
| 6300 | 71.3 | 73.0 | 73.9 | 76.2 | 78.4 | 79.9 | 81.4 | 83.7 | 84.1 | 84.3 | 80.3 | 73.8 | 74.3 | 123.1 |
| 8000 | 70.6 | 72.7 | 74.3 | 76.7 | 77.1 | 78.8 | 80.5 | 82.7 | 83.7 | 83.9 | 79.2 | 72.9 | 72.1 | 122.8 |
| 10000 | 69.8 | 71.2 | 72.9 | 74.2 | 76.7 | 78.1 | 79.3 | 82.3 | 81.7 | 81.8 | 77.2 | 72.4 | 71.2 | 122.0 |
| 12500 | 67.1 | 69.4 | 70.5 | 72.8 | 73.7 | 76.2 | 78.2 | 80.2 | 80.0 | 78.8 | 75.2 | 70.2 | 68.4 | 120.8 |
| 16000 | 64.8 | 68.2 | 69.2 | 71.2 | 71.2 | 74.5 | 76.0 | 78.3 | 77.4 | 76.8 | 72.5 | 68.5 | 66.3 | 120.1 |
| 20000 | 60.7 | 65.3 | 65.3 | 68.4 | 67.8 | 70.3 | 72.7 | 73.7 | 73.5 | 73.0 | 68.3 | 64.2 | 61.1 | 117.9 |
| 25000 | 57.9 | 60.5 | 62.2 | 64.6 | 65.5 | 68.0 | 69.0 | 68.9 | 71.1 | 68.7 | 64.4 | 60.0 | 58.4 | 116.8 |
| 31500 | 54.8 | 56.7 | 59.2 | 62.9 | 62.8 | 63.8 | 64.9 | 65.9 | 66.0 | 66.4 | 61.9 | 55.9 | 53.6 | 116.5 |
| 40000 | 49.7 | 52.0 | 53.8 | 57.6 | 55.7 | 58.2 | 59.5 | 60.8 | 61.1 | 59.8 | 56.8 | 49.7 | 47.9 | 114.9 |
| 50000 | 42.4 | 45.3 | 47.9 | 50.4 | 49.5 | 51.4 | 53.9 | 53.2 | 55.7 | 51.3 | 49.5 | 44.5 | 41.5 | 112.7 |
| 63000 | 37.4 | 39.6 | 42.5 | 44.0 | 44.8 | 44.6 | 47.8 | 45.7 | 50.2 | 43.7 | 43.4 | 38.7 | 35.4 | 111.9 |
| 80000 | 33.1 | 36.0 | 38.3 | 40.5 | 40.9 | 38.9 | 40.9 | 39.6 | 42.1 | 38.2 | 37.6 | 29.2 | 27.1 | 112.8 |
| GASPL | 86.3 | 85.9 | 87.1 | 88.8 | 91.4 | 91.7 | 93.6 | 96.1 | 97.7 | 100.4 | 101.8 | 98.6 | 97.4 | 138.3 |

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TEST DATE 12-15-77 TAPE NO. N281 ALPHA SB59 TAMB 35.96
LOCATION C41 ANECH CH AERO. RDG. ADH017 PAMB 29.4543 RELHUM 78.90

MODEL TEST POINT 0521 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 131.5 SQ CH (20.38 SQ IN) - MODEL 112.78 M/SEC (370.0 FPS) FREE-JET SPEED

07/19/79 17.781

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F. 70 PERCENT R.H. STD. DAY. SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X05210

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PNL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 73.7 | 74.4 | 73.6 | 74.1 | 72.4 | 72.8 | 72.3 | 73.1 | 76.9 | 81.6 | 84.9 | 87.3 | 88.7 | 122.0 |
| 315 | 73.7 | 74.4 | 73.6 | 74.0 | 75.0 | 73.8 | 74.3 | 74.2 | 79.8 | 86.3 | 89.2 | 89.4 | 89.1 | 124.6 |
| 400 | 75.1 | 75.9 | 73.5 | 74.5 | 76.9 | 75.4 | 75.5 | 77.7 | 81.2 | 87.7 | 91.0 | 89.4 | 87.9 | 125.6 |
| 500 | 77.1 | 77.6 | 76.4 | 77.0 | 79.1 | 77.8 | 77.3 | 78.2 | 83.2 | 83.9 | 92.1 | 89.6 | 90.5 | 126.8 |
| 630 | 79.9 | 78.6 | 77.4 | 77.7 | 81.0 | 78.2 | 79.7 | 79.9 | 85.0 | 89.6 | 92.4 | 87.9 | 92.2 | 127.5 |
| 800 | 91.1 | 82.1 | 80.3 | 80.2 | 81.5 | 79.1 | 80.8 | 82.2 | 86.8 | 89.6 | 91.8 | 87.1 | 92.0 | 128.5 |
| 1000 | 80.9 | 79.0 | 79.8 | 80.1 | 82.0 | 80.3 | 81.7 | 83.3 | 86.9 | 89.0 | 91.3 | 85.2 | 91.2 | 127.4 |
| 1250 | 80.8 | 80.2 | 80.5 | 81.4 | 83.6 | 81.6 | 82.3 | 84.1 | 87.1 | 88.4 | 89.3 | 84.1 | 89.0 | 126.9 |
| 1600 | 80.2 | 81.7 | 81.0 | 80.9 | 82.7 | 81.6 | 82.3 | 84.7 | 87.7 | 89.3 | 88.2 | 83.1 | 89.8 | 127.1 |
| 2000 | 81.9 | 79.9 | 81.2 | 81.1 | 83.4 | 81.6 | 83.1 | 84.6 | 87.1 | 88.6 | 86.5 | 82.0 | 87.3 | 126.5 |
| 2500 | 80.5 | 81.3 | 80.6 | 81.4 | 83.1 | 82.5 | 83.1 | 85.0 | 89.1 | 88.5 | 86.6 | 82.6 | 89.6 | 127.2 |
| 3150 | 80.9 | 79.9 | 80.9 | 81.4 | 83.2 | 82.8 | 84.5 | 86.5 | 88.8 | 87.9 | 85.8 | 81.4 | 89.1 | 127.2 |
| 4000 | 80.3 | 80.5 | 81.2 | 81.5 | 82.9 | 81.9 | 84.0 | 86.0 | 87.6 | 87.3 | 84.7 | 80.4 | 86.8 | 126.6 |
| 5000 | 79.4 | 80.1 | 79.9 | 81.4 | 82.4 | 82.2 | 84.4 | 85.2 | 87.2 | 87.4 | 83.9 | 80.5 | 87.6 | 126.5 |
| 6300 | 79.0 | 79.4 | 80.1 | 80.8 | 82.9 | 82.9 | 83.8 | 85.5 | 86.4 | 86.3 | 82.4 | 79.3 | 85.5 | 126.2 |
| 8000 | 80.6 | 81.1 | 80.8 | 81.7 | 81.1 | 81.8 | 82.9 | 84.2 | 85.2 | 85.2 | 81.2 | 79.5 | 85.1 | 125.8 |
| 10000 | 77.1 | 78.6 | 79.4 | 81.0 | 81.1 | 81.8 | 84.1 | 83.7 | 82.5 | 79.7 | 77.9 | 82.9 | 82.9 | 125.1 |
| 12500 | 78.6 | 78.9 | 79.3 | 79.2 | 78.2 | 79.2 | 80.7 | 82.0 | 81.8 | 81.3 | 77.7 | 76.8 | 81.4 | 124.5 |
| 16000 | 75.3 | 76.5 | 76.4 | 77.3 | 75.6 | 77.5 | 78.5 | 80.2 | 77.9 | 77.4 | 73.6 | 72.8 | 76.7 | 123.1 |
| 20000 | 72.7 | 74.9 | 74.7 | 75.3 | 72.3 | 73.3 | 75.1 | 75.4 | 76.5 | 74.2 | 70.7 | 69.5 | 74.7 | 121.9 |
| 25000 | 67.9 | 71.5 | 70.2 | 71.9 | 69.9 | 71.0 | 71.5 | 70.9 | 71.4 | 71.6 | 67.8 | 65.1 | 70.0 | 120.6 |
| 31500 | 64.4 | 65.9 | 66.3 | 67.3 | 67.3 | 66.8 | 67.2 | 67.3 | 67.4 | 66.0 | 63.6 | 59.9 | 65.3 | 119.5 |
| 40000 | 60.4 | 61.3 | 62.5 | 64.8 | 60.2 | 61.2 | 61.8 | 62.3 | 62.8 | 58.4 | 57.3 | 55.7 | 59.8 | 118.6 |
| 50000 | 54.9 | 56.2 | 56.6 | 59.1 | 54.0 | 54.4 | 56.3 | 54.9 | 58.3 | 51.8 | 52.3 | 50.9 | 54.7 | 117.3 |
| 63000 | 46.7 | 48.5 | 49.8 | 51.0 | 48.7 | 47.6 | 50.2 | 47.5 | 51.0 | 46.9 | 46.9 | 41.9 | 47.0 | 115.5 |
| 80000 | 37.6 | 39.2 | 41.4 | 42.0 | 44.8 | 41.9 | 43.1 | 40.9 | 41.2 | 37.1 | 37.1 | 32.0 | 37.2 | 114.8 |

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OASPL 94.5 92.4 92.3 92.8 94.2 93.4 94.6 96.2 98.7 100.2 100.9 97.9 101.5 139.4

MODEL/FEHL SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 370.00 REEFACTION CORRECTION - YES
INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 12-15-77 TAPE NO. N281 ALPHA SB59 JAMB 35.98
LOCATION C41 ANECH CH AERO. RDG. ADH017 PAMB 29.4543 RELHUM 78.90

MODEL TEST POINT ACQUSTIC RANGE SIZE FREE-JET SPEED
0500 0521 12.2 M (40.0 FT) ARC 131.5 SQ CM (20.38 SQ IN) - MODEL 112.78 M/SEC (370.0 FPS)

07/19/79 17.781

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 2400.0 FT., SL

IDENTIFICATION - FJ-400-FMODL X05215

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 54.0 | 56.3 | 57.0 | 58.7 | 59.5 | 58.2 | 59.2 | 59.9 | 62.8 | 68.2 | 70.0 | 66.2 | 61.3 | 144.0 |
| 63 | 56.0 | 58.0 | 57.9 | 59.2 | 61.8 | 60.6 | 59.9 | 60.5 | 64.7 | 69.3 | 71.0 | 66.3 | 63.8 | 145.2 |
| 80 | 58.7 | 58.9 | 58.9 | 59.9 | 63.6 | 61.0 | 62.3 | 62.1 | 66.4 | 70.0 | 71.2 | 64.5 | 65.4 | 145.8 |
| 100 | 59.9 | 62.4 | 61.7 | 62.4 | 64.0 | 61.8 | 63.3 | 64.3 | 68.2 | 69.9 | 70.5 | 63.6 | 65.1 | 146.9 |
| 125 | 59.5 | 59.2 | 61.1 | 62.2 | 64.5 | 62.9 | 64.2 | 65.4 | 68.3 | 69.3 | 70.0 | 61.5 | 64.1 | 145.7 |
| 160 | 59.3 | 60.2 | 61.7 | 62.1 | 66.0 | 64.1 | 64.6 | 66.0 | 68.3 | 68.5 | 67.8 | 60.2 | 61.5 | 145.2 |
| 200 | 58.4 | 61.6 | 62.0 | 62.6 | 64.9 | 64.1 | 64.5 | 66.4 | 68.7 | 69.2 | 66.4 | 58.9 | 61.8 | 145.4 |
| 250 | 59.8 | 59.5 | 62.0 | 62.7 | 65.4 | 63.7 | 65.1 | 66.2 | 67.9 | 68.2 | 64.4 | 57.3 | 58.7 | 144.9 |
| 315 | 58.0 | 60.5 | 61.1 | 62.8 | 64.9 | 64.3 | 64.8 | 66.3 | 69.6 | 67.8 | 64.1 | 57.4 | 60.2 | 145.5 |
| 400 | 57.9 | 58.8 | 61.0 | 62.3 | 64.6 | 64.4 | 65.9 | 67.4 | 68.9 | 66.7 | 62.8 | 55.6 | 58.7 | 145.6 |
| 500 | 56.8 | 58.9 | 61.0 | 62.2 | 64.0 | 63.2 | 65.2 | 66.7 | 67.4 | 65.8 | 61.2 | 53.9 | 55.4 | 144.9 |
| 630 | 55.4 | 58.2 | 59.4 | 61.8 | 63.3 | 63.2 | 65.3 | 66.5 | 66.7 | 63.4 | 59.9 | 53.3 | 55.1 | 144.8 |
| 800 | 54.5 | 57.1 | 59.2 | 60.9 | 63.5 | 63.7 | 64.5 | 65.6 | 65.5 | 64.0 | 57.9 | 51.4 | 51.9 | 144.5 |
| 1000 | 55.6 | 58.5 | 59.7 | 61.6 | 61.6 | 62.5 | 63.4 | 64.1 | 64.1 | 62.6 | 56.3 | 51.0 | 50.4 | 144.2 |
| 1250 | 51.7 | 55.7 | 58.1 | 60.7 | 61.5 | 61.6 | 62.2 | 63.9 | 62.4 | 59.6 | 54.3 | 48.6 | 46.7 | 143.5 |
| 1600 | 52.3 | 55.4 | 57.6 | 58.7 | 58.3 | 59.5 | 60.8 | 61.5 | 60.1 | 57.7 | 51.4 | 46.1 | 42.8 | 142.8 |
| 2000 | 48.0 | 52.4 | 54.3 | 56.5 | 55.5 | 57.7 | 58.4 | 59.4 | 55.9 | 53.3 | 46.3 | 40.4 | 35.1 | 141.4 |
| 2500 | 43.6 | 49.6 | 51.7 | 53.8 | 51.6 | 53.0 | 54.5 | 54.0 | 53.5 | 48.8 | 41.6 | 34.3 | 28.2 | 140.3 |
| 3150 | 35.5 | 43.7 | 45.3 | 48.8 | 47.9 | 49.3 | 49.6 | 47.8 | 46.6 | 43.8 | 35.3 | 25.0 | 15.1 | 138.9 |
| 4000 | 25.7 | 33.3 | 37.6 | 41.0 | 42.3 | 42.2 | 42.2 | 41.0 | 38.7 | 33.4 | 24.9 | 10.8 | | 137.9 |
| 5000 | 11.9 | 21.2 | 27.5 | 33.1 | 30.2 | 31.8 | 31.8 | 30.5 | 27.9 | 18.3 | 8.9 | | | 137.0 |
| 6300 | | 1.9 | 9.7 | 16.6 | 13.9 | 15.1 | 16.2 | 12.4 | 11.3 | | | | | 135.6 |
| 8000 | | | | | | | | | | | | | | 134.0 |
| 10000 | | | | | | | | | | | | | | 133.2 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| GASPL | 72.5 | 71.3 | 72.4 | 73.6 | 75.7 | 74.9 | 76.0 | 77.1 | 79.0 | 79.5 | 78.9 | 72.8 | 72.9 | 157.5 |
| PNL | 74.5 | 76.2 | 78.1 | 79.7 | 80.6 | 80.8 | 81.8 | 82.7 | 83.7 | 82.3 | 78.6 | 71.3 | 72.5 | |
| PNLT | 76.3 | 76.8 | 78.1 | 79.7 | 80.6 | 80.8 | 81.8 | 82.7 | 83.7 | 82.3 | 78.6 | 71.3 | 72.5 | |

DIAMETER RATIO 8.288 FREQUENCY SHIFT -9

TEST DATE 12-15-77 TAPE NO. N281 iALPHA SB59 TAMB 35.96
LOCATION C41 ANECH CH AERO. RDO. ADH017 PAMB 29.4543 RELHUM 78.90

MODEL TEST POINT 0500 0521 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 112.78 M/SEC (370.0 FPS)

6.1.7 Measured Acoustic Data for Model 6

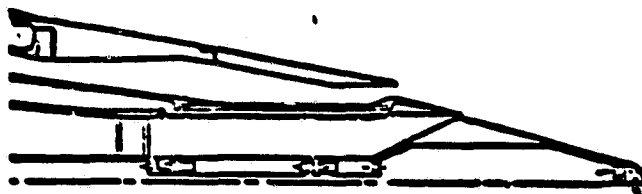
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$R_F^o = 0.901$ conic outer nozzle

$R_F^i = 0.902$ conic inner nozzle

$A^i/A^o = 0.324$

without struts in outer flow



07/19/79 18.286

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H.; STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X30010
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

OASPL

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OF POOR QUALITY

TEST DATE 03-16-78

LOCATION C41 ANECH CH

TAPE NO. N300

AERO. RDG. ADH169

I ALPHA

PAMB

TAMB 39.92

RELHUM 22.40

MODEL TEST POINT

3001

ACQUSTIC RANGE

12.2 M (40.0 FT) ARC

SIZE

110.1 SQ CM (17.07 SQ IN) - MODEL

FREE-JET SPEED

0. M/SEC (0. FPS)

07/19/79 18.280

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, S8 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X30010

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 84.0 | 89.6 | 87.6 | 88.1 | 88.5 | 91.6 | 94.0 | 95.1 | 97.6 | 103.9 | 109.3 | 112.7 | 112.9 | 145.9 |
| 315 | 84.6 | 87.2 | 87.9 | 89.0 | 90.8 | 92.9 | 93.8 | 95.2 | 99.2 | 105.8 | 110.9 | 114.6 | 113.2 | 147.3 |
| 400 | 86.4 | 88.7 | 89.5 | 89.3 | 90.3 | 93.0 | 94.3 | 96.8 | 100.5 | 109.3 | 113.9 | 116.6 | 114.5 | 149.5 |
| 500 | 87.7 | 89.8 | 91.0 | 90.6 | 97.2 | 94.5 | 95.9 | 97.6 | 101.3 | 110.9 | 115.7 | 116.9 | 114.8 | 150.5 |
| 630 | 88.8 | 91.6 | 92.9 | 92.2 | 102.3 | 95.9 | 96.8 | 99.2 | 103.7 | 111.5 | 116.6 | 118.0 | 115.7 | 151.8 |
| 800 | 92.9 | 91.7 | 93.7 | 94.2 | 94.8 | 96.9 | 98.6 | 101.2 | 105.4 | 112.3 | 117.1 | 118.6 | 116.7 | 152.2 |
| 1000 | 98.2 | 98.0 | 98.3 | 97.1 | 96.7 | 98.5 | 99.7 | 102.8 | 106.6 | 111.6 | 116.0 | 118.4 | 116.3 | 151.8 |
| 1250 | 95.1 | 97.9 | 99.2 | 99.0 | 99.3 | 101.4 | 101.8 | 107.4 | 111.5 | 116.9 | 119.3 | 116.2 | 115.2 | 152.5 |
| 1600 | 99.0 | 96.6 | 97.1 | 97.1 | 98.2 | 100.8 | 101.5 | 104.6 | 108.6 | 112.2 | 117.2 | 119.1 | 115.9 | 152.6 |
| 2000 | 101.7 | 101.2 | 100.5 | 98.7 | 97.6 | 99.7 | 101.3 | 104.7 | 109.5 | 113.3 | 117.0 | 118.2 | 113.5 | 152.3 |
| 2500 | 103.9 | 102.2 | 101.9 | 101.7 | 99.8 | 100.6 | 102.8 | 104.9 | 108.9 | 113.5 | 117.0 | 116.4 | 110.2 | 151.8 |
| 3150 | 103.4 | 103.8 | 102.8 | 102.3 | 101.6 | 102.7 | 102.8 | 106.5 | 110.3 | 112.9 | 117.6 | 115.0 | 109.0 | 151.9 |
| 4000 | 101.3 | 101.9 | 102.9 | 102.6 | 101.7 | 103.3 | 102.9 | 106.1 | 109.2 | 112.3 | 116.2 | 111.8 | 107.1 | 150.8 |
| 5000 | 100.4 | 100.8 | 101.3 | 102.0 | 102.3 | 103.7 | 104.6 | 106.8 | 108.6 | 112.2 | 114.6 | 111.2 | 105.9 | 150.3 |
| 6300 | 98.9 | 100.8 | 101.6 | 100.8 | 101.6 | 103.7 | 104.1 | 106.6 | 108.5 | 112.0 | 112.8 | 110.0 | 105.5 | 149.7 |
| 8000 | 98.1 | 100.3 | 100.9 | 101.0 | 101.8 | 103.2 | 103.7 | 106.6 | 108.3 | 110.4 | 111.4 | 108.3 | 104.1 | 149.2 |
| 10000 | 96.5 | 99.1 | 100.8 | 100.6 | 101.7 | 103.6 | 102.5 | 106.3 | 106.8 | 109.5 | 110.1 | 107.1 | 102.8 | 148.8 |
| 12500 | 94.0 | 97.5 | 98.9 | 100.0 | 101.0 | 102.4 | 101.3 | 104.2 | 104.5 | 106.9 | 107.8 | 104.6 | 101.1 | 147.6 |
| 16000 | 92.3 | 96.1 | 97.7 | 98.5 | 100.9 | 102.2 | 100.9 | 102.5 | 103.3 | 105.4 | 105.3 | 102.5 | 100.0 | 147.6 |
| 20000 | 87.0 | 93.4 | 94.2 | 96.0 | 99.3 | 100.7 | 97.6 | 99.6 | 100.9 | 101.6 | 101.9 | 99.9 | 96.9 | 146.6 |
| 25000 | 85.9 | 89.5 | 92.0 | 92.8 | 96.7 | 98.1 | 94.6 | 94.6 | 97.6 | 96.6 | 98.1 | 95.6 | 94.2 | 145.4 |
| 31500 | 84.1 | 86.3 | 89.7 | 91.6 | 91.4 | 92.2 | 91.1 | 91.6 | 94.5 | 96.4 | 94.9 | 90.6 | 89.0 | 145.3 |
| 40000 | 79.9 | 81.5 | 85.0 | 85.9 | 89.9 | 90.6 | 85.9 | 86.7 | 89.5 | 90.9 | 89.6 | 86.4 | 84.4 | 145.0 |
| 50000 | 73.0 | 74.8 | 77.8 | 80.0 | 81.5 | 82.9 | 81.4 | 79.9 | 84.4 | 84.1 | 84.4 | 81.1 | 79.3 | 143.0 |
| 63000 | 68.0 | 68.9 | 71.3 | 73.7 | 73.7 | 74.9 | 75.2 | 74.1 | 79.9 | 77.9 | 78.1 | 75.9 | 74.4 | 142.2 |
| 80000 | 62.5 | 62.6 | 66.1 | 69.0 | 67.2 | 68.6 | 68.1 | 69.1 | 74.5 | 72.5 | 73.9 | 68.4 | 67.1 | 143.5 |
| 0ASPL | 111.2 | 111.7 | 112.2 | 112.0 | 113.9 | 114.1 | 114.3 | 117.0 | 119.8 | 123.9 | 127.8 | 128.5 | 125.6 | 163.8 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 0. | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|-------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 03-18-78 | TAPE NO. | N300 | ALPHA | 3859 | TAMB | 39.92 |
|-----------|---|------------|---|-------|--|--------|-------|
| LOCATION | C41 ANECH CH <th>AERO. RDG.</th> <td>ADH169 <th>PAMB</th> <td>29.5000 <th>RELHUM</th> <td>22.40</td> </td></td> | AERO. RDG. | ADH169 <th>PAMB</th> <td>29.5000 <th>RELHUM</th> <td>22.40</td> </td> | PAMB | 29.5000 <th>RELHUM</th> <td>22.40</td> | RELHUM | 22.40 |

| MODEL | TEST POINT | ACOUSTIC RANGE | 12.2 M (40.0 FT) | ARC | 110.1 SQ CH (17.07 SQ IN) | MODEL | FREE-JET SPEED |
|-------|------------|----------------|-------------------|-----|----------------------------|-------|-----------------|
| 6 | 3001 | | | | | 0. | M/SEC (0, FPS) |

07/19/79 19.286

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FM00L X3001B

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PML |
|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 67.4 | 71.0 | 73.4 | 73.6 | 80.6 | 78.1 | 79.4 | 80.6 | 83.6 | 92.1 | 95.5 | 94.4 | 89.0 | 169.7 |
| 63 | 68.5 | 72.9 | 75.2 | 75.2 | 91.7 | 79.4 | 80.2 | 82.2 | 85.9 | 92.7 | 96.3 | 95.5 | 89.8 | 170.9 |
| 80 | 72.5 | 72.8 | 75.9 | 77.2 | 78.2 | 80.5 | 82.0 | 84.2 | 87.7 | 93.4 | 96.8 | 96.0 | 90.7 | 171.3 |
| 100 | 77.8 | 79.1 | 80.5 | 80.0 | 80.0 | 82.0 | 83.0 | 85.8 | 88.8 | 92.7 | 95.5 | 95.7 | 90.2 | 170.9 |
| 125 | 74.5 | 78.9 | 81.3 | 81.3 | 82.6 | 84.8 | 85.1 | 86.6 | 89.6 | 92.5 | 96.3 | 96.4 | 89.8 | 171.5 |
| 160 | 78.2 | 77.5 | 79.1 | 79.9 | 81.4 | 84.1 | 84.6 | 87.4 | 90.6 | 93.1 | 96.4 | 96.0 | 89.1 | 171.7 |
| 200 | 80.7 | 81.9 | 82.3 | 81.3 | 80.8 | 82.8 | 84.3 | 87.3 | 91.3 | 94.0 | 96.0 | 94.8 | 86.3 | 171.5 |
| 250 | 82.6 | 83.5 | 84.1 | 82.6 | 83.6 | 85.6 | 87.3 | 90.5 | 94.0 | 95.7 | 92.6 | 82.3 | 171.0 | |
| 315 | 81.7 | 83.8 | 84.1 | 84.4 | 84.2 | 85.4 | 85.4 | 88.6 | 91.6 | 93.0 | 95.9 | 90.6 | 80.3 | 171.1 |
| 400 | 79.1 | 81.6 | 83.9 | 84.5 | 84.0 | 85.8 | 85.3 | 88.0 | 90.2 | 92.0 | 94.0 | 86.9 | 77.5 | 169.9 |
| 500 | 77.8 | 80.2 | 82.0 | 83.6 | 84.4 | 85.9 | 86.7 | 88.4 | 89.3 | 91.6 | 92.0 | 85.6 | 75.4 | 169.4 |
| 630 | 75.9 | 79.9 | 82.1 | 82.2 | 83.7 | 85.7 | 86.0 | 88.0 | 88.9 | 91.1 | 89.8 | 83.9 | 74.0 | 168.9 |
| 800 | 74.7 | 79.1 | 81.2 | 82.2 | 83.6 | 85.1 | 85.5 | 87.8 | 88.6 | 89.3 | 88.1 | 81.6 | 71.6 | 168.3 |
| 1000 | 72.9 | 77.8 | 81.1 | 81.9 | 83.5 | 85.6 | 84.3 | 87.6 | 87.1 | 88.2 | 86.5 | 79.9 | 69.3 | 167.9 |
| 1250 | 70.2 | 76.1 | 79.2 | 81.3 | 82.9 | 84.5 | 83.8 | 85.6 | 84.6 | 85.6 | 84.0 | 76.9 | 66.4 | 166.8 |
| 1600 | 68.1 | 74.7 | 78.1 | 80.0 | 83.1 | 84.6 | 83.1 | 84.0 | 83.7 | 84.0 | 81.1 | 73.9 | 63.5 | 166.7 |
| 2000 | 62.3 | 71.8 | 74.6 | 77.8 | 81.8 | 83.3 | 80.0 | 81.4 | 81.3 | 79.9 | 77.2 | 70.1 | 57.8 | 165.7 |
| 2500 | 59.9 | 67.3 | 72.2 | 74.5 | 78.2 | 80.8 | 77.1 | 76.3 | 77.8 | 74.4 | 72.2 | 63.6 | 50.8 | 164.6 |
| 3150 | 55.6 | 62.4 | 68.9 | 72.5 | 73.3 | 74.4 | 73.6 | 73.6 | 72.5 | 66.4 | 54.4 | 38.0 | 164.4 | |
| 4000 | 46.0 | 53.7 | 61.0 | 64.4 | 69.7 | 70.8 | 65.7 | 65.2 | 65.5 | 63.1 | 55.7 | 41.1 | 19.7 | 164.1 |
| 5000 | 29.7 | 39.9 | 48.1 | 53.4 | 56.6 | 58.7 | 56.6 | 53.3 | 54.6 | 49.2 | 41.1 | 23.5 | 162.1 | |
| 6300 | 7.8 | 20.7 | 30.4 | 37.2 | 39.8 | 41.7 | 41.2 | 37.6 | 39.0 | 28.7 | 18.0 | | 161.4 | |
| 8000 | | | 5.1 | 14.8 | 16.6 | 19.1 | 17.5 | 14.9 | 13.8 | 1.0 | | | 162.6 | |

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GASPL 89.5 91.5 93.2 93.9 96.6 96.6 96.6 98.8 101.0 104.0 106.3 104.7 98.2 162.6
 PNL 94.0 97.3 99.5 101.1 103.7 105.6 103.8 105.3 106.6 108.3 109.5 105.8 97.5
 PNL 94.7 97.8 99.5 101.1 104.8 105.6 103.8 105.3 107.2 108.8 109.5 105.8 97.5

DIAMETER RATIO 9.056 .FREQUENCY SHIFT -10

TEST DATE 03-16-78 TAPE NO. N300 IALPHA SB59 TAMB 39.92
 LOCATION C41 ANECH CH AERO. RDG. ADH169 PAMB 29.5000 RELHUM 22.40

MODEL TEST POINT 3001 ACOUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 0. FREE-JET SPEED 0. FPS

07/19/79 18.286

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X30020
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PA

FREQ
50
63
80
100
125
160
200

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| | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 78.5 | 82.1 | 83.3 | 83.6 | 85.5 | 88.0 | 90.2 | 92.8 | 95.1 | 104.5 | 108.2 | 107.8 | 141.1 |
| 315 | 80.9 | 81.9 | 82.1 | 83.3 | 84.6 | 87.0 | 87.9 | 90.3 | 94.3 | 101.2 | 106.1 | 110.1 | 107.7 |
| 400 | 82.5 | 83.3 | 84.5 | 83.6 | 85.4 | 87.6 | 88.7 | 90.9 | 95.1 | 105.0 | 108.9 | 111.1 | 106.5 |
| 500 | 82.6 | 83.7 | 86.0 | 85.5 | 89.4 | 88.7 | 90.1 | 92.0 | 96.7 | 106.4 | 111.3 | 110.9 | 103.3 |
| 630 | 84.3 | 85.6 | 86.6 | 86.4 | 89.5 | 90.1 | 92.0 | 94.4 | 99.1 | 107.2 | 111.6 | 110.0 | 99.4 |
| 800 | 86.6 | 85.4 | 87.6 | 88.4 | 89.3 | 91.6 | 92.8 | 96.2 | 101.2 | 108.3 | 111.9 | 108.3 | 97.0 |
| 1000 | 87.0 | 87.0 | 89.3 | 88.6 | 90.1 | 93.0 | 94.4 | 97.6 | 102.8 | 108.1 | 110.3 | 105.2 | 94.8 |
| 1250 | 87.3 | 89.4 | 91.2 | 90.7 | 91.8 | 94.1 | 95.3 | 99.0 | 103.4 | 108.0 | 109.9 | 103.3 | 93.5 |
| 1600 | 86.5 | 93.1 | 91.4 | 92.7 | 95.1 | 96.7 | 99.9 | 104.8 | 105.5 | 108.7 | 100.6 | 93.4 | 144.1 |
| 2000 | 98.4 | 99.0 | 97.5 | 94.5 | 93.1 | 95.2 | 95.8 | 100.8 | 105.7 | 109.4 | 108.0 | 100.0 | 94.0 |
| 2500 | 98.9 | 99.9 | 100.7 | 99.7 | 97.5 | 96.6 | 98.3 | 101.2 | 105.4 | 110.1 | 107.7 | 100.7 | 93.9 |
| 3150 | 98.9 | 100.0 | 100.5 | 100.8 | 100.8 | 100.9 | 99.3 | 102.5 | 105.3 | 109.2 | 108.8 | 101.7 | 94.0 |
| 4000 | 97.3 | 97.6 | 99.4 | 99.1 | 99.4 | 101.3 | 100.7 | 102.4 | 105.9 | 109.3 | 108.7 | 101.6 | 94.3 |
| 5000 | 96.9 | 96.7 | 98.0 | 98.2 | 99.5 | 100.9 | 101.8 | 103.5 | 105.5 | 109.0 | 108.0 | 101.7 | 94.9 |
| 6300 | 96.4 | 96.8 | 98.0 | 97.5 | 98.3 | 100.6 | 101.3 | 104.8 | 105.6 | 108.2 | 108.2 | 101.2 | 94.9 |
| 8000 | 95.5 | 97.2 | 97.5 | 97.6 | 98.7 | 100.1 | 100.9 | 104.0 | 106.2 | 107.6 | 106.6 | 100.3 | 94.0 |
| 10000 | 94.6 | 96.3 | 97.4 | 97.0 | 98.9 | 101.0 | 99.9 | 103.7 | 105.5 | 106.9 | 105.5 | 99.8 | 93.7 |
| 12500 | 92.9 | 94.6 | 95.8 | 96.6 | 98.1 | 99.3 | 99.0 | 101.9 | 103.4 | 105.3 | 103.0 | 98.5 | 92.5 |
| 16000 | 91.5 | 93.2 | 95.3 | 95.9 | 98.3 | 99.3 | 97.8 | 100.4 | 102.2 | 104.1 | 100.9 | 96.9 | 91.9 |
| 20000 | 87.2 | 91.3 | 92.3 | 94.2 | 96.7 | 98.0 | 95.4 | 97.8 | 99.8 | 100.9 | 97.6 | 94.6 | 90.3 |
| 25000 | 86.8 | 87.9 | 90.6 | 90.5 | 94.8 | 95.7 | 93.3 | 93.5 | 97.0 | 96.5 | 93.8 | 91.0 | 88.8 |
| 31500 | 85.3 | 84.6 | 88.1 | 89.8 | 90.0 | 90.6 | 90.0 | 90.5 | 94.2 | 95.2 | 91.5 | 86.5 | 83.9 |
| 40000 | 80.3 | 80.4 | 83.6 | 85.0 | 88.5 | 89.3 | 85.3 | 86.1 | 89.1 | 89.0 | 86.0 | 81.3 | 79.7 |
| 50000 | 73.4 | 73.5 | 76.7 | 78.4 | 80.8 | 82.1 | 80.5 | 79.2 | 84.2 | 82.2 | 80.0 | 76.0 | 73.7 |
| 63000 | 67.8 | 69.6 | 72.0 | 72.6 | 73.3 | 75.1 | 72.7 | 73.5 | 75.5 | 73.0 | 70.5 | 67.6 | 64.0 |
| 80000 | 61.8 | 60.7 | 63.7 | 66.9 | 65.8 | 67.5 | 67.0 | 67.2 | 72.6 | 68.6 | 67.0 | 62.0 | 59.2 |
| GASPL | 107.6 | 108.1 | 108.9 | 108.7 | 109.9 | 110.9 | 110.8 | 113.7 | 116.7 | 120.4 | 121.4 | 118.9 | 113.7 |

TEST DATE 03-16-78 TAPE NO. N300 ALPHA 3859 TAPB 39.56
LOCATION C41 ANECH CH AERO. RDG. ADH152 PAMB 29.5450 RELHUM 21.20

MODEL TEST POINT 3002 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 110.1 SQ CM (17.07 SQ IN) - MODEL 118.26 M/SEC (388.0 FPS) FREE-JET SPEED

07/19/79 18.286

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FHJDL X30020

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 85.7 | 88.1 | 88.7 | 88.3 | 85.1 | 85.5 | 86.2 | 86.7 | 90.9 | 97.0 | 101.4 | 105.7 | 105.2 | 128.6 |
| 315 | 85.7 | 88.1 | 88.7 | 88.3 | 86.3 | 87.2 | 86.6 | 87.6 | 92.6 | 101.7 | 105.2 | 108.1 | 105.9 | 141.1 |
| 400 | 88.3 | 88.1 | 86.9 | 86.6 | 87.1 | 87.8 | 87.9 | 88.9 | 95.1 | 104.4 | 109.3 | 110.4 | 105.2 | 143.8 |
| 500 | 88.9 | 88.8 | 88.9 | 86.9 | 91.2 | 89.0 | 89.3 | 90.3 | 97.4 | 105.1 | 109.8 | 110.3 | 104.3 | 144.0 |
| 630 | 90.0 | 89.9 | 90.8 | 88.8 | 102.0 | 90.5 | 91.1 | 92.4 | 93.6 | 106.4 | 110.5 | 109.7 | 104.4 | 144.8 |
| 800 | 94.4 | 94.0 | 93.1 | 90.9 | 91.2 | 92.1 | 91.9 | 94.1 | 101.6 | 106.7 | 109.5 | 107.8 | 104.7 | 144.0 |
| 1000 | 94.0 | 91.6 | 92.5 | 91.9 | 92.2 | 93.6 | 93.6 | 93.6 | 102.2 | 106.5 | 109.0 | 105.7 | 103.1 | 143.5 |
| 1250 | 94.4 | 93.3 | 94.2 | 92.3 | 94.0 | 94.9 | 94.6 | 97.0 | 103.8 | 107.0 | 107.7 | 102.9 | 102.9 | 143.3 |
| 1600 | 94.8 | 95.7 | 96.2 | 94.3 | 94.6 | 96.0 | 96.2 | 98.1 | 104.9 | 108.2 | 107.3 | 102.4 | 103.6 | 144.0 |
| 2000 | 103.0 | 98.5 | 93.5 | 94.3 | 93.2 | 96.4 | 96.6 | 99.2 | 104.5 | 109.2 | 107.4 | 103.4 | 103.8 | 144.8 |
| 2500 | 103.2 | 104.7 | 101.8 | 97.7 | 98.8 | 98.1 | 98.3 | 100.0 | 106.3 | 108.9 | 109.1 | 105.3 | 104.8 | 146.4 |
| 3150 | 106.0 | 105.1 | 104.5 | 102.8 | 103.7 | 102.8 | 99.8 | 101.8 | 106.6 | 109.7 | 109.6 | 105.6 | 105.6 | 147.7 |
| 4000 | 104.7 | 105.3 | 105.1 | 104.5 | 102.9 | 103.7 | 101.7 | 102.2 | 106.5 | 109.6 | 109.2 | 106.1 | 106.6 | 147.9 |
| 5000 | 104.5 | 104.1 | 104.9 | 103.6 | 103.5 | 103.9 | 103.3 | 103.7 | 106.8 | 109.0 | 109.5 | 105.8 | 106.8 | 148.1 |
| 6300 | 104.1 | 103.3 | 103.7 | 103.0 | 102.3 | 103.6 | 102.8 | 105.0 | 107.6 | 108.6 | 108.1 | 105.0 | 106.1 | 147.9 |
| 8000 | 103.4 | 103.1 | 103.6 | 102.1 | 102.7 | 103.1 | 102.6 | 104.3 | 107.3 | 108.3 | 107.5 | 105.1 | 106.3 | 148.0 |
| 10000 | 102.4 | 103.4 | 102.9 | 102.1 | 102.9 | 104.0 | 101.9 | 104.3 | 105.7 | 107.3 | 105.6 | 104.5 | 106.8 | 147.9 |
| 12500 | 101.3 | 102.2 | 102.5 | 101.2 | 102.1 | 102.3 | 101.1 | 102.7 | 105.4 | 107.1 | 104.6 | 103.9 | 106.1 | 147.9 |
| 16000 | 99.0 | 100.0 | 100.3 | 100.2 | 102.3 | 102.3 | 100.0 | 101.5 | 104.3 | 105.3 | 102.5 | 102.6 | 105.3 | 148.0 |
| 20000 | 97.1 | 98.2 | 99.5 | 99.1 | 101.2 | 101.0 | 97.9 | 99.5 | 100.0 | 99.0 | 96.6 | 96.7 | 101.3 | 147.0 |
| 25000 | 95.0 | 97.9 | 97.5 | 97.9 | 99.4 | 98.7 | 94.7 | 93.6 | 95.6 | 100.4 | 97.4 | 95.7 | 100.1 | 147.9 |
| 31500 | 93.7 | 93.7 | 95.1 | 93.4 | 94.0 | 93.6 | 92.3 | 91.9 | 95.9 | 95.5 | 92.7 | 90.7 | 95.7 | 147.0 |
| 40000 | 88.7 | 87.4 | 90.0 | 90.7 | 93.1 | 92.3 | 87.6 | 87.8 | 91.7 | 89.5 | 87.5 | 86.2 | 90.5 | 147.3 |
| 50000 | 86.0 | 84.9 | 86.8 | 86.7 | 85.4 | 85.1 | 83.0 | 81.2 | 87.9 | 83.2 | 81.5 | 81.9 | 85.7 | 146.6 |
| 63000 | 78.2 | 77.1 | 78.9 | 79.1 | 76.6 | 76.3 | 77.5 | 74.6 | 82.0 | 77.9 | 77.0 | 75.2 | 79.6 | 144.9 |
| 80000 | 68.5 | 67.7 | 68.7 | 70.2 | 69.8 | 70.5 | 69.4 | 68.8 | 72.2 | 68.0 | 67.2 | 65.4 | 69.8 | 143.0 |
| GASPL | 114.2 | 113.9 | 113.8 | 112.6 | 113.4 | 113.4 | 112.0 | 113.6 | 117.4 | 120.3 | 120.9 | 119.4 | 118.3 | 160.3 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 388.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 03-16-78 | TAPE NO. | N300 | ALPHA | 8859 | TAMB | 39.66 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH152 | PAMB | 29.5450 | RELHUM | 21.20 |

| MODEL | TEST POINT | ACUSTIC RANGE | ARC | 110.1 SQ CM (17.07 SQ IN) | MODEL | 116.26 M/SEC (389.0 FPS) |
|-------|------------|-------------------|-----|----------------------------|----------------|---------------------------|
| 6 | 3002 | 12.2 M (40.0 FT) | ARC | SIZE | FREE-JET SPEED | |

07/19/79 18.296

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 2400.0 FT. SL

IDENTIFICATION - FJ-400-FM00L X30025

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PLA |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 69.6 | 70.0 | 71.2 | 69.9 | 74.6 | 72.5 | 72.8 | 73.3 | 79.7 | 86.3 | 89.5 | 87.6 | 78.4 | 163.1 |
| 63 | 69.7 | 71.1 | 73.1 | 71.6 | 85.4 | 74.0 | 74.5 | 75.4 | 81.9 | 87.7 | 90.2 | 87.2 | 78.5 | 164.0 |
| 80 | 74.0 | 75.1 | 75.3 | 73.8 | 74.6 | 75.6 | 75.3 | 77.1 | 83.9 | 87.9 | 89.1 | 85.2 | 78.7 | 163.2 |
| 100 | 73.5 | 72.7 | 74.7 | 74.6 | 75.5 | 77.1 | 77.0 | 78.5 | 84.4 | 87.6 | 88.5 | 83.0 | 77.0 | 162.6 |
| 125 | 73.8 | 74.3 | 76.3 | 75.2 | 77.2 | 78.3 | 77.9 | 79.9 | 85.9 | 88.0 | 87.1 | 80.0 | 76.5 | 162.4 |
| 160 | 74.0 | 76.5 | 78.1 | 77.0 | 77.7 | 79.3 | 79.4 | 80.8 | 86.9 | 89.0 | 86.6 | 79.3 | 76.9 | 163.1 |
| 200 | 82.0 | 79.1 | 77.3 | 76.8 | 78.2 | 79.5 | 79.6 | 81.6 | 86.6 | 89.9 | 86.4 | 80.0 | 76.6 | 163.9 |
| 250 | 83.9 | 85.1 | 83.5 | 80.0 | 82.8 | 81.1 | 81.2 | 82.4 | 87.9 | 89.3 | 87.8 | 81.5 | 77.0 | 165.6 |
| 315 | 84.3 | 85.2 | 86.1 | 84.9 | 86.3 | 85.6 | 82.4 | 83.9 | 87.9 | 89.8 | 87.9 | 81.3 | 76.9 | 166.8 |
| 400 | 82.5 | 85.0 | 86.1 | 86.3 | 85.3 | 86.2 | 84.0 | 84.0 | 87.5 | 89.3 | 87.1 | 81.1 | 77.0 | 167.1 |
| 500 | 82.0 | 83.5 | 85.6 | 85.2 | 85.6 | 86.1 | 85.4 | 85.3 | 87.5 | 88.4 | 86.9 | 80.2 | 76.2 | 167.2 |
| 630 | 81.1 | 82.3 | 84.2 | 84.4 | 84.2 | 85.7 | 84.7 | 85.4 | 86.1 | 87.7 | 85.1 | 78.6 | 74.6 | 167.0 |
| 800 | 80.1 | 82.0 | 83.9 | 83.4 | 84.5 | 85.1 | 84.4 | 85.6 | 87.6 | 87.2 | 84.2 | 78.4 | 73.9 | 167.1 |
| 1000 | 79.8 | 82.1 | 83.2 | 83.3 | 84.7 | 86.0 | 83.7 | 85.6 | 86.0 | 86.0 | 82.0 | 77.3 | 72.3 | 167.0 |
| 1250 | 77.4 | 80.8 | 82.8 | 82.5 | 84.1 | 84.4 | 83.0 | 84.0 | 85.7 | 85.7 | 80.7 | 76.2 | 71.4 | 167.1 |
| 1600 | 74.8 | 78.6 | 80.7 | 81.8 | 84.5 | 84.7 | 82.2 | 83.1 | 83.7 | 83.9 | 78.3 | 74.1 | 69.6 | 167.2 |
| 2000 | 72.4 | 76.6 | 79.9 | 80.8 | 83.7 | 83.7 | 80.3 | 81.2 | 80.4 | 77.4 | 71.9 | 66.9 | 62.2 | 168.1 |
| 2500 | 69.0 | 75.7 | 77.7 | 79.6 | 81.6 | 81.5 | 77.2 | 75.2 | 79.7 | 78.2 | 71.5 | 63.7 | 56.7 | 167.0 |
| 3150 | 65.2 | 69.8 | 74.1 | 74.3 | 75.9 | 75.8 | 74.2 | 72.8 | 74.9 | 71.6 | 64.2 | 54.5 | 44.7 | 166.2 |
| 4000 | 54.8 | 59.6 | 66.1 | 69.2 | 72.8 | 72.4 | 67.4 | 65.2 | 67.8 | 61.7 | 53.6 | 42.0 | 25.9 | 166.4 |
| 5000 | 42.7 | 50.0 | 57.0 | 60.2 | 60.5 | 60.8 | 58.2 | 54.6 | 58.1 | 48.2 | 38.2 | 24.3 | | 165.7 |
| 6300 | 18.0 | 28.9 | 38.0 | 42.7 | 42.6 | 43.1 | 43.6 | 38.2 | 41.1 | 29.6 | 16.8 | | | 164.0 |
| 8000 | | | 8.0 | 16.0 | 19.2 | 21.0 | 18.6 | 14.6 | 11.4 | | | | | 162.1 |

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QASPL 91.9 93.4 94.6 94.3 95.7 95.8 94.2 96.3 98.4 100.1 99.1 94.3 96.4 179.3

PWL 97.7 100.1 102.2 102.8 104.6 104.6 102.4 103.0 105.6 105.6 102.9 97.0 91.9

PWLT 99.1 101.4 103.2 103.3 105.8 104.6 102.9 103.0 106.3 106.3 102.9 97.0 91.9

DIAMETER RATIO 9.056 FREQUENCY SHIFT -10

TEST DATE 03-16-78 TAPE NO. N300 ALPHA 3259 TAMP 38.96
LOCATION C41 ANECH CH AERO. RDG. ADH152 PAMP 29.5450 RELNUM 21.20

MODEL TEST POINT 3002 ACUSTIC RANGE 731.5 H (2400.0 FT) SL 9032.2 SQ CH (1400.00 SQ IN) - FULL 118.26 M/SEC (388.0 FPS) FREE-JET SPEED

07/19/79 19.286

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FM0DL X30030
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

OASPL

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TEST DATE 03-16-78

LOCATION C41 ANECH CH

TAPE NO. N300

AERG. RDG. ADH143

TAPB 40.28

RELHUM 22.00

MODEL TEST POINT

3003

ACOUSTIC RANGE

12.2 M (40.0 FT) ARC

SIZE

110.1 SQ CM (17.07 SQ IN) - MODEL

FREE-JET SPEED

0. M/SEC (0. FPS)

07/19/79 18.286

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X30030

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PHL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

OASPL

99.5

101.8

102.7

102.9

105.5

106.2

107.1

109.9

112.4

116.0

117.3

119.1

117.9

155.3

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) FREE JET DIAMETER (IN) 0. 48.00 REFRACTION CORRECTION - YES TURBULANCE CORRECTION - YES

TEST DATE 03-16-78 LOCATION C41 ANECH CH TAPE NO. N300 AERO. RDG. ADH143 ALPHA 3859 PAMB 29.5100 YAMB 40.28 RELHUM 22.00

MODEL TEST POINT 3003 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 110.1 SQ CH (17.07 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X30035

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 62.2 | 65.6 | 68.4 | 68.4 | 73.4 | 72.4 | 73.6 | 75.1 | 77.9 | 84.9 | 87.2 | 86.9 | 81.6 | 162.1 |
| 63 | 62.8 | 67.4 | 70.7 | 69.9 | 83.2 | 73.7 | 74.9 | 77.2 | 79.9 | 84.9 | 87.5 | 86.5 | 81.6 | 162.5 |
| 80 | 65.8 | 67.6 | 70.2 | 71.7 | 72.7 | 75.2 | 76.0 | 78.7 | 81.7 | 86.2 | 86.8 | 85.2 | 80.7 | 161.9 |
| 100 | 68.5 | 69.4 | 72.3 | 72.5 | 73.5 | 75.3 | 77.0 | 79.3 | 82.8 | 86.0 | 85.1 | 84.0 | 79.4 | 161.3 |
| 125 | 66.3 | 70.4 | 72.8 | 73.3 | 74.6 | 76.8 | 77.8 | 80.3 | 82.6 | 85.8 | 85.8 | 83.2 | 79.1 | 161.4 |
| 160 | 68.5 | 69.7 | 71.8 | 73.4 | 74.6 | 77.1 | 78.6 | 80.4 | 83.1 | 85.8 | 85.7 | 83.0 | 79.1 | 161.7 |
| 200 | 67.7 | 70.9 | 72.8 | 73.3 | 74.3 | 76.1 | 78.1 | 80.8 | 83.8 | 85.3 | 84.3 | 81.8 | 77.5 | 161.2 |
| 250 | 67.6 | 70.6 | 72.3 | 73.6 | 75.1 | 77.1 | 79.1 | 80.8 | 83.3 | 85.5 | 83.7 | 82.6 | 77.3 | 161.6 |
| 315 | 67.5 | 71.1 | 72.3 | 73.6 | 74.9 | 77.2 | 78.9 | 82.1 | 83.3 | 84.0 | 83.1 | 81.9 | 76.1 | 161.5 |
| 400 | 66.6 | 69.6 | 71.9 | 72.7 | 74.5 | 77.0 | 78.3 | 81.2 | 82.2 | 83.5 | 81.8 | 79.9 | 74.0 | 160.9 |
| 500 | 65.8 | 68.7 | 71.0 | 72.9 | 74.7 | 76.9 | 78.4 | 81.1 | 81.5 | 83.1 | 81.5 | 79.1 | 72.7 | 161.0 |
| 630 | 65.2 | 68.9 | 71.1 | 72.2 | 74.0 | 77.5 | 78.3 | 80.2 | 80.9 | 81.8 | 80.3 | 77.9 | 72.0 | 160.7 |
| 800 | 64.0 | 69.9 | 70.9 | 71.7 | 74.1 | 76.4 | 77.5 | 79.6 | 80.1 | 80.5 | 79.6 | 77.4 | 70.4 | 160.6 |
| 1000 | 61.9 | 69.6 | 71.6 | 72.4 | 73.8 | 76.9 | 76.1 | 79.1 | 79.4 | 79.4 | 78.2 | 76.4 | 68.3 | 160.4 |
| 1250 | 59.4 | 68.3 | 71.2 | 72.3 | 73.9 | 75.5 | 75.0 | 77.3 | 76.8 | 77.1 | 76.0 | 73.4 | 64.9 | 159.3 |
| 1500 | 56.9 | 67.2 | 70.8 | 72.0 | 74.1 | 75.8 | 74.1 | 76.0 | 76.2 | 75.8 | 73.6 | 70.7 | 61.3 | 159.3 |
| 2000 | 52.3 | 64.8 | 67.6 | 70.3 | 73.8 | 74.6 | 71.5 | 73.1 | 73.1 | 71.9 | 70.7 | 65.4 | 55.8 | 158.5 |
| 2500 | 50.4 | 60.0 | 65.4 | 67.0 | 71.7 | 72.3 | 69.6 | 68.3 | 70.5 | 67.1 | 65.2 | 59.6 | 48.8 | 157.5 |
| 3150 | 47.1 | 55.4 | 61.8 | 66.0 | 67.4 | 65.7 | 65.5 | 66.1 | 67.4 | 60.1 | 61.2 | 51.2 | 36.2 | 157.7 |
| 4000 | 37.5 | 47.5 | 54.8 | 59.1 | 63.9 | 65.0 | 60.2 | 58.7 | 58.5 | 55.4 | 49.4 | 37.9 | 18.5 | 158.1 |
| 5000 | 22.2 | 34.4 | 42.8 | 48.9 | 52.4 | 54.9 | 53.3 | 49.8 | 49.1 | 42.0 | 34.1 | 19.3 | | 157.3 |
| 6300 | 14.2 | 24.4 | 31.7 | 34.5 | 36.7 | 37.0 | 33.1 | 32.5 | 32.5 | 21.7 | 11.3 | | | 155.7 |
| 8000 | | | 7.8 | 10.3 | 13.6 | 11.7 | 8.9 | 7.0 | | | | | | 156.1 |

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OASPL 77.8 81.5 83.8 84.6 88.1 88.7 89.5 91.8 93.6 96.1 96.0 94.5 89.5 173.9
 PNL 81.7 87.8 91.0 92.6 95.5 96.9 96.0 97.8 98.8 100.0 98.7 96.6 90.4
 PNL 81.7 87.8 91.0 92.6 95.5 96.9 97.0 97.8 98.8 100.0 98.7 96.6 90.4

DIAMETER RATIO 9.056 FREQUENCY SHIFT -10

TEST DATE 03-16-78 TAPE NO. N300 ALPHA SB59 TAMB 40.28
 LOCATION C41 ANECH CH AERO. RDG. ADH143 PAMB 29.5100 RELNUM 22.00

MODEL TEST POINT 3003 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.0 SQ IN) - FULL SIZE FREE-JET SPEED
 3 3003 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.0 SQ IN) - FULL SIZE FREE-JET SPEED
 3 3003 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.0 SQ IN) - FULL SIZE FREE-JET SPEED

07/19/79 10.206

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 75 PERCENT R.H. STD. DAY, 88 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X30040
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PUL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

107.9

108.5

109.3

110.0

111.2

113.7

116.9

121.2

123.4

121.6

115.9

159.6

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TEST DATE 03-16-78

LOCATION C41 ANECH CH

TAPE NO.

N300

ALPHA S859

PAPB 29.5450

TAMP 39.56

RELHJM 21.20

MODEL TEST POINT

6 3004

ACOUSTIC RANGE

12.2 M (40.0 FT)

SIZE

110.1 SQ CH (17.07 SQ IN)

MODEL

- MODEL

FREE-JET SPEED

92.05 M/SEC (302.0 FPS)

07/19/79 18.286

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X30040

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 150 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 85.1 | 88.8 | 86.5 | 86.7 | 85.9 | 87.1 | 88.0 | 88.6 | 92.4 | 98.5 | 103.5 | 107.8 | 107.0 | 140.5 |
| 315 | 85.1 | 88.8 | 86.5 | 87.0 | 87.4 | 88.5 | 88.2 | 89.3 | 94.4 | 103.1 | 107.3 | 110.1 | 108.1 | 143.1 |
| 400 | 87.0 | 87.6 | 87.8 | 87.7 | 87.7 | 88.8 | 89.1 | 90.3 | 96.2 | 105.3 | 110.4 | 112.3 | 108.7 | 145.3 |
| 500 | 88.6 | 88.6 | 89.1 | 89.1 | 89.3 | 90.0 | 90.6 | 91.7 | 98.4 | 106.5 | 111.8 | 112.7 | 108.1 | 146.1 |
| 630 | 89.1 | 89.5 | 90.6 | 91.4 | 90.6 | 91.6 | 91.9 | 94.0 | 100.6 | 107.7 | 112.1 | 113.2 | 106.7 | 146.7 |
| 800 | 92.5 | 92.3 | 92.9 | 92.4 | 91.5 | 93.2 | 93.4 | 95.6 | 102.9 | 107.8 | 111.7 | 112.4 | 106.2 | 146.4 |
| 1000 | 93.3 | 91.2 | 92.2 | 92.7 | 92.9 | 94.4 | 94.8 | 96.3 | 103.4 | 107.3 | 110.9 | 110.7 | 104.5 | 145.5 |
| 1250 | 94.8 | 92.8 | 93.9 | 94.9 | 94.9 | 96.1 | 95.9 | 97.9 | 104.1 | 107.9 | 110.5 | 108.8 | 108.2 | 145.3 |
| 1500 | 94.0 | 95.0 | 96.2 | 94.7 | 95.0 | 96.7 | 96.7 | 99.1 | 105.1 | 108.7 | 109.9 | 107.4 | 103.5 | 145.3 |
| 2000 | 98.7 | 94.6 | 95.3 | 96.8 | 94.8 | 96.4 | 96.9 | 99.3 | 105.0 | 109.8 | 110.9 | 108.3 | 104.2 | 146.1 |
| 2500 | 102.9 | 101.6 | 100.2 | 101.8 | 99.1 | 97.8 | 99.1 | 100.7 | 106.4 | 109.5 | 112.1 | 109.0 | 104.9 | 147.4 |
| 3150 | 104.9 | 104.7 | 104.1 | 103.6 | 102.4 | 101.6 | 99.6 | 101.6 | 105.9 | 109.3 | 112.1 | 108.6 | 105.2 | 148.1 |
| 4000 | 103.6 | 103.8 | 103.8 | 103.3 | 102.0 | 103.0 | 101.3 | 102.0 | 106.5 | 110.1 | 111.9 | 107.7 | 104.8 | 148.2 |
| 5000 | 103.1 | 102.7 | 104.1 | 102.5 | 102.5 | 103.0 | 102.3 | 103.3 | 107.0 | 110.0 | 110.7 | 107.1 | 104.8 | 148.1 |
| 6300 | 102.6 | 102.6 | 102.9 | 102.4 | 101.8 | 103.4 | 103.3 | 104.0 | 107.2 | 109.9 | 109.4 | 106.1 | 103.3 | 148.0 |
| 8000 | 102.2 | 102.6 | 102.2 | 102.4 | 102.3 | 103.5 | 102.7 | 104.7 | 107.2 | 109.4 | 107.8 | 104.0 | 102.9 | 147.9 |
| 10000 | 101.4 | 102.4 | 102.0 | 102.0 | 103.0 | 103.8 | 102.3 | 104.2 | 105.5 | 107.5 | 106.4 | 102.7 | 102.3 | 147.6 |
| 12500 | 99.7 | 101.3 | 101.9 | 100.9 | 102.0 | 102.5 | 101.2 | 102.4 | 104.7 | 107.3 | 106.2 | 102.7 | 102.9 | 147.6 |
| 16000 | 97.5 | 98.8 | 99.7 | 100.9 | 101.4 | 102.3 | 100.2 | 102.0 | 103.0 | 104.7 | 102.5 | 101.4 | 102.0 | 147.5 |
| 20000 | 95.4 | 97.3 | 98.1 | 99.3 | 100.8 | 101.5 | 98.1 | 98.5 | 101.7 | 101.3 | 100.3 | 98.3 | 101.2 | 147.4 |
| 25000 | 92.8 | 95.7 | 95.8 | 96.1 | 99.1 | 98.5 | 95.3 | 94.4 | 98.3 | 99.5 | 97.1 | 93.5 | 95.5 | 146.9 |
| 31500 | 90.8 | 91.7 | 93.3 | 94.5 | 93.4 | 93.6 | 91.9 | 91.6 | 95.6 | 95.6 | 93.8 | 90.6 | 94.6 | 146.6 |
| 40000 | 87.0 | 86.0 | 89.5 | 89.6 | 92.8 | 92.0 | 87.1 | 87.2 | 91.0 | 89.3 | 88.0 | 86.0 | 88.5 | 146.7 |
| 50000 | 83.6 | 82.9 | 85.3 | 84.0 | 84.4 | 84.6 | 83.0 | 80.7 | 86.7 | 83.4 | 82.1 | 80.5 | 83.0 | 145.3 |
| 63000 | 75.5 | 75.4 | 77.0 | 76.5 | 75.8 | 76.3 | 76.5 | 74.0 | 80.8 | 79.1 | 77.5 | 71.4 | 74.1 | 143.7 |
| 80000 | 66.2 | 65.5 | 68.2 | 72.7 | 69.6 | 71.2 | 68.8 | 67.7 | 71.0 | 69.3 | 67.7 | 61.6 | 64.3 | 142.9 |
| GASPL | 112.6 | 112.7 | 112.9 | 112.7 | 112.8 | 113.3 | 112.2 | 113.6 | 117.4 | 120.9 | 122.9 | 122.0 | 118.3 | 160.6 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 302.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 03-16-78 | TAPE NO. | N300 | ALPHA | SB59 | TAMB | 39.66 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH151 | PAMB | 29.5430 | RELHUM | 21.20 |

| MODEL | TEST POINT | ACOUSTIC RANGE | ARC | 110.1 SQ CM (| 17.07 SQ IN) | MODEL | FREE-JET SPEED |
|-------|------------|----------------|----------|---------------|---------------|------------|----------------|
| 6 | 3004 | 12.2 M (| 40.0 FT) | SIZE | 92.05 M/SEC (| 302.0 FPS) | |

07/19/79 18.286

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
89.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X30045

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 68.3 | 69.8 | 70.9 | 72.2 | 73.7 | 73.5 | 74.0 | 74.7 | 80.7 | 87.7 | 91.5 | 90.2 | 82.3 | 165.3 |
| 63 | 68.8 | 70.7 | 72.9 | 74.4 | 83.0 | 75.2 | 75.3 | 77.0 | 83.1 | 88.9 | 91.8 | 90.6 | 80.8 | 165.8 |
| 80 | 72.2 | 73.5 | 75.1 | 75.3 | 74.9 | 76.7 | 76.8 | 78.6 | 85.1 | 89.0 | 91.3 | 89.8 | 80.2 | 165.5 |
| 100 | 72.8 | 72.3 | 74.4 | 75.6 | 76.2 | 77.9 | 78.1 | 79.2 | 85.6 | 88.5 | 90.5 | 88.0 | 78.4 | 164.7 |
| 125 | 74.2 | 73.8 | 76.0 | 77.8 | 78.2 | 79.5 | 79.2 | 80.7 | 86.2 | 89.0 | 90.0 | 85.9 | 76.8 | 164.4 |
| 160 | 73.3 | 75.8 | 78.2 | 77.4 | 78.2 | 80.5 | 79.8 | 81.8 | 87.1 | 89.5 | 89.2 | 84.3 | 76.8 | 164.4 |
| 200 | 77.7 | 75.2 | 77.1 | 79.4 | 77.8 | 79.6 | 79.9 | 81.9 | 86.8 | 90.5 | 89.9 | 84.9 | 77.0 | 165.3 |
| 250 | 81.6 | 82.0 | 81.8 | 84.1 | 81.9 | 80.8 | 81.9 | 83.1 | 88.0 | 89.9 | 90.8 | 85.2 | 77.1 | 166.5 |
| 315 | 83.2 | 84.7 | 85.4 | 85.8 | 84.9 | 84.3 | 82.2 | 83.7 | 87.2 | 89.4 | 90.4 | 84.2 | 76.6 | 167.2 |
| 400 | 81.4 | 83.5 | 84.8 | 85.1 | 84.3 | 85.5 | 83.6 | 83.8 | 87.5 | 89.9 | 89.7 | 82.7 | 75.2 | 167.3 |
| 500 | 80.5 | 82.1 | 84.8 | 84.1 | 84.6 | 85.2 | 84.4 | 84.8 | 87.7 | 89.4 | 88.1 | 81.6 | 74.2 | 167.2 |
| 630 | 79.6 | 81.7 | 83.4 | 83.7 | 83.7 | 85.5 | 85.2 | 85.4 | 87.7 | 89.0 | 86.4 | 78.9 | 71.8 | 167.1 |
| 800 | 78.8 | 81.4 | 82.5 | 83.6 | 84.1 | 85.5 | 84.5 | 86.0 | 87.5 | 88.3 | 84.4 | 77.3 | 70.4 | 167.1 |
| 1000 | 77.8 | 81.1 | 82.3 | 83.3 | 84.8 | 85.8 | 84.2 | 85.5 | 86.7 | 86.2 | 82.8 | 75.5 | 68.8 | 166.7 |
| 1250 | 75.9 | 79.9 | 82.2 | 82.2 | 84.0 | 84.7 | 83.2 | 83.8 | 85.0 | 85.9 | 81.3 | 74.9 | 68.2 | 166.7 |
| 1600 | 73.3 | 77.3 | 80.1 | 82.4 | 83.7 | 85.5 | 82.4 | 83.5 | 83.4 | 82.8 | 78.3 | 72.8 | 65.5 | 166.6 |
| 2000 | 70.6 | 75.7 | 78.6 | 81.0 | 83.2 | 84.2 | 80.6 | 80.3 | 82.1 | 79.6 | 75.6 | 68.5 | 62.1 | 166.5 |
| 2500 | 66.8 | 73.4 | 76.0 | 77.7 | 81.6 | 81.2 | 77.8 | 76.0 | 78.5 | 77.3 | 71.2 | 61.5 | 52.1 | 166.0 |
| 3150 | 62.3 | 67.8 | 72.4 | 75.4 | 75.3 | 75.8 | 73.8 | 72.5 | 74.6 | 71.7 | 65.3 | 54.4 | 43.6 | 165.7 |
| 4000 | 53.1 | 58.2 | 63.5 | 68.1 | 72.6 | 72.2 | 66.9 | 55.6 | 67.0 | 61.5 | 54.1 | 41.7 | 23.9 | 165.8 |
| 5000 | 40.3 | 48.0 | 55.5 | 57.4 | 59.5 | 60.3 | 58.2 | 54.2 | 56.9 | 48.5 | 38.8 | 22.9 | 164.5 | |
| 6300 | 15.4 | 27.1 | 36.1 | 40.1 | 41.8 | 43.1 | 42.5 | 37.6 | 39.9 | 30.9 | 17.4 | | 162.8 | |
| 8000 | | | 7.4 | 18.5 | 19.0 | 21.7 | 18.2 | 13.5 | 10.2 | | | | 162.0 | |

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| | | | | | | | | | | | | | | |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| OASPL | 90.3 | 92.1 | 93.7 | 94.4 | 95.1 | 95.6 | 94.4 | 95.3 | 96.5 | 100.8 | 101.2 | 97.7 | 69.1 | 179.5 |
| PWL | 96.2 | 98.6 | 101.1 | 102.7 | 104.3 | 104.9 | 102.6 | 103.2 | 105.3 | 106.1 | 105.0 | 99.1 | 90.8 | |
| PNLT | 97.5 | 99.8 | 102.1 | 102.7 | 105.5 | 104.9 | 102.6 | 103.2 | 106.0 | 106.1 | 105.0 | 99.1 | 92.0 | |

DIAMETER RATIO 9.056 FREQUENCY SHIFT -10

TEST DATE 03-16-78 TAPE NO. N300 ALPHA 8859 TAMB 39.56
LOCATION C41 ANECH CH AERO. RDG. ADH151 PAMB. 29.5450 RELHUM 21.20

MODEL TEST POINT 3004 ACOUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 92.05 M/SEC (302.0 FPS) FREE-JET SPEED

07/19/79 18.286

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X30050
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

OASPL

ORIGINAL PAGE IS
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TEST DATE 03-16-78

LOCATION C41 ANECH CH

TAPE NO. N300

AERO. RDG. ADH144

IALPHA SB59

PAMB 29.5100

TAMB 40.46

RELHUM 23.40

MODEL TEST POINT

3005

ACOUSTIC RANGE

12.2 M (40.0 FT)

ARC

110.1 SQ CM (

SIZE

17.07 SQ IN)

MODEL

117.04 M/SEC (

FREE-JET SPEED

384.0 FPS)

07/19/79 16.286

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
69.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X30050

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

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0ASPL 102.8 102.9 103.0 102.2 107.3 104.5 104.2 105.6 109.3 111.7 111.2 109.2 109.0 152.2

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 384.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-16-78 TAPE NO. N300 ALPHA 3859 YAMS 40.46
LOCATION C41 ANECH CH AERO. RDG. ADH144 PAMB 29.5100 RELHUM 23.40

MODEL TEST POINT 3005 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 110.1 SQ CM (17.07 SQ IN) - MODEL 117.04 M/SEC (304.0 FPS)
FREE-JET SPEED

433

07/19/79 16.266

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X30055

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 62.8 | 64.9 | 64.5 | 64.6 | 76.2 | 67.5 | 68.5 | 67.0 | 72.6 | 78.3 | 79.6 | 75.6 | 67.3 | 153.7 |
| 63 | 66.5 | 67.6 | 69.5 | 66.8 | 88.1 | 68.5 | 68.2 | 68.7 | 74.5 | 79.7 | 80.1 | 74.5 | 68.5 | 158.0 |
| 80 | 67.1 | 68.8 | 72.9 | 68.0 | 69.7 | 69.4 | 69.6 | 70.8 | 76.4 | 80.5 | 79.3 | 72.0 | 67.5 | 154.3 |
| 100 | 67.1 | 67.0 | 68.7 | 69.3 | 69.0 | 71.2 | 70.5 | 71.7 | 76.6 | 80.5 | 79.2 | 70.3 | 67.4 | 154.2 |
| 125 | 67.6 | 67.8 | 69.9 | 69.5 | 71.1 | 72.4 | 71.7 | 72.9 | 78.5 | 79.8 | 78.8 | 69.9 | 66.9 | 154.5 |
| 160 | 67.1 | 69.9 | 71.5 | 70.4 | 71.6 | 73.0 | 73.0 | 74.0 | 78.7 | 80.8 | 76.8 | 69.3 | 66.6 | 154.8 |
| 200 | 69.0 | 68.6 | 70.6 | 70.8 | 71.3 | 72.4 | 73.5 | 74.9 | 78.9 | 80.5 | 76.4 | 69.3 | 65.8 | 154.9 |
| 250 | 68.6 | 69.6 | 71.1 | 70.6 | 72.5 | 73.5 | 74.6 | 75.5 | 79.7 | 79.8 | 75.9 | 69.5 | 65.0 | 155.3 |
| 315 | 68.9 | 70.0 | 71.1 | 71.4 | 73.1 | 74.5 | 75.1 | 76.3 | 80.0 | 79.9 | 75.8 | 68.7 | 64.3 | 155.9 |
| 400 | 68.5 | 70.0 | 71.0 | 72.4 | 72.9 | 74.6 | 75.0 | 76.7 | 79.4 | 79.6 | 75.6 | 68.6 | 64.1 | 156.2 |
| 500 | 68.1 | 69.9 | 71.8 | 72.1 | 73.6 | 76.1 | 76.3 | 77.3 | 78.9 | 79.5 | 75.3 | 68.7 | 64.0 | 156.8 |
| 630 | 68.0 | 69.8 | 71.7 | 72.3 | 74.5 | 76.5 | 76.7 | 76.9 | 79.3 | 78.7 | 75.6 | 69.8 | 65.5 | 157.4 |
| 800 | 70.5 | 71.9 | 73.3 | 73.2 | 74.1 | 75.9 | 76.5 | 76.6 | 78.5 | 78.9 | 74.9 | 70.1 | 65.2 | 158.0 |
| 1000 | 67.8 | 70.2 | 71.0 | 71.7 | 74.8 | 76.7 | 75.9 | 76.8 | 77.7 | 78.1 | 74.6 | 70.7 | 65.9 | 158.3 |
| 1250 | 69.0 | 72.2 | 73.2 | 72.9 | 74.5 | 75.6 | 74.9 | 75.8 | 77.5 | 77.9 | 74.2 | 70.1 | 65.6 | 159.1 |
| 1600 | 66.2 | 70.0 | 71.6 | 72.5 | 75.2 | 75.9 | 74.1 | 75.8 | 76.3 | 75.2 | 70.8 | 67.0 | 61.4 | 158.9 |
| 2000 | 64.5 | 69.5 | 71.6 | 72.2 | 76.1 | 75.2 | 72.6 | 73.1 | 72.4 | 69.2 | 65.4 | 61.9 | 56.6 | 158.4 |
| 2500 | 61.4 | 68.6 | 69.9 | 71.2 | 73.8 | 73.7 | 69.2 | 67.0 | 71.8 | 70.2 | 63.8 | 57.5 | 49.6 | 159.2 |
| 3150 | 57.8 | 62.7 | 66.3 | 67.2 | 69.1 | 69.3 | 66.5 | 65.3 | 61.6 | 54.7 | 46.7 | 36.7 | 159.4 | |
| 4000 | 47.5 | 53.1 | 59.1 | 62.7 | 67.8 | 67.7 | 61.6 | 58.4 | 62.1 | 54.8 | 46.6 | 36.1 | 19.1 | 160.5 |
| 5000 | 36.3 | 44.4 | 51.2 | 54.9 | 56.5 | 57.8 | 55.8 | 51.7 | 51.8 | 41.8 | 31.9 | 17.7 | | 160.8 |
| 6300 | 11.9 | 23.3 | 32.2 | 38.4 | 37.4 | 38.3 | 38.8 | 33.6 | 33.9 | 22.2 | 10.2 | | | 158.3 |
| 8000 | | | 3.6 | 10.8 | 12.6 | 14.7 | 12.6 | 8.8 | 4.3 | | | | | 156.2 |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| OASPL | 80.2 | 82.1 | 83.8 | 83.8 | 90.2 | 86.9 | 86.5 | 87.4 | 90.3 | 91.5 | 89.1 | 89.0 | 78.1 | 171.1 |
| PWL | 87.0 | 91.0 | 92.9 | 93.7 | 96.7 | 96.6 | 94.8 | 95.4 | 97.3 | 96.9 | 93.0 | 87.3 | 82.1 | |
| PNLT | 88.5 | 92.4 | 94.1 | 94.3 | 97.8 | 97.6 | 96.0 | 96.6 | 97.9 | 98.5 | 93.0 | 87.3 | 82.1 | |

DIAMETER RATIO 9.056 FREQUENCY SHIFT -10

TEST DATE 03-16-78 TAPE NO. N300 ALPHA SB59 TAMB 40.46
 LOCATION C41 ANECH CH AERO. RDG. ADH144 PAMB 29.5100 RELHUM 23.40

MODEL TEST POINT 3005 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.04 M/SEC (384.0 FPS)
 SIZE FREE-JET SPEED

07/19/79 10.286

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X30060
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

50
63
80
100
125
150
200

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 79.5 | 85.1 | 83.3 | 84.1 | 85.2 | 87.8 | 89.5 | 90.9 | 93.8 | 99.4 | 103.8 | 106.7 | 108.4 | 140.2 |
| 315 | 81.1 | 83.7 | 84.9 | 86.0 | 87.3 | 89.4 | 89.8 | 91.7 | 95.7 | 102.3 | 108.1 | 108.6 | 107.7 | 142.1 |
| 400 | 83.2 | 85.4 | 85.7 | 86.0 | 87.3 | 89.7 | 90.8 | 92.8 | 97.2 | 106.0 | 108.9 | 110.3 | 108.3 | 144.2 |
| 500 | 84.0 | 86.0 | 86.0 | 87.3 | 88.4 | 90.8 | 91.9 | 93.8 | 98.8 | 108.4 | 111.3 | 111.9 | 109.3 | 146.1 |
| 630 | 84.6 | 87.4 | 88.2 | 88.2 | 92.0 | 92.4 | 93.5 | 95.9 | 100.4 | 108.7 | 111.9 | 111.8 | 108.9 | 146.4 |
| 800 | 86.9 | 87.9 | 89.4 | 90.7 | 91.3 | 93.2 | 94.3 | 97.5 | 101.7 | 109.0 | 111.6 | 110.8 | 108.7 | 146.3 |
| 1000 | 92.5 | 92.5 | 94.3 | 92.8 | 92.7 | 94.8 | 95.7 | 98.8 | 103.6 | 109.6 | 110.4 | 107.6 | 146.2 | |
| 1250 | 98.1 | 92.2 | 93.4 | 93.2 | 94.3 | 96.7 | 98.8 | 100.0 | 104.2 | 109.5 | 111.4 | 110.3 | 107.0 | 146.4 |
| 1600 | 90.2 | 91.1 | 91.6 | 92.4 | 93.7 | 95.6 | 97.2 | 99.9 | 105.1 | 110.0 | 111.2 | 109.6 | 106.6 | 146.4 |
| 2000 | 90.7 | 92.5 | 93.2 | 92.5 | 93.1 | 95.4 | 97.1 | 101.0 | 106.0 | 111.1 | 110.8 | 109.2 | 104.5 | 146.7 |
| 2500 | 89.9 | 91.7 | 92.7 | 93.2 | 93.8 | 96.1 | 98.0 | 100.9 | 105.9 | 111.6 | 110.0 | 108.9 | 104.1 | 146.6 |
| 3150 | 90.4 | 92.7 | 93.3 | 93.3 | 94.6 | 96.7 | 98.3 | 102.0 | 105.8 | 110.2 | 109.0 | 108.2 | 103.7 | 145.9 |
| 4000 | 90.8 | 91.9 | 92.9 | 93.1 | 93.9 | 96.3 | 97.9 | 102.1 | 104.9 | 108.8 | 108.2 | 106.6 | 102.5 | 145.0 |
| 5000 | 90.1 | 92.5 | 92.8 | 93.2 | 94.8 | 96.9 | 98.8 | 102.2 | 104.8 | 108.7 | 107.8 | 106.2 | 102.4 | 145.1 |
| 6300 | 88.4 | 92.8 | 93.6 | 93.3 | 94.5 | 97.9 | 98.6 | 101.8 | 103.9 | 108.0 | 106.7 | 106.0 | 102.9 | 144.7 |
| 8000 | 89.0 | 93.7 | 93.3 | 94.2 | 95.2 | 97.6 | 98.9 | 101.8 | 103.6 | 106.6 | 106.4 | 105.8 | 101.8 | 144.6 |
| 10000 | 87.7 | 93.8 | 94.7 | 94.3 | 96.6 | 98.5 | 99.2 | 101.5 | 102.3 | 105.4 | 105.3 | 105.1 | 101.2 | 144.5 |
| 12500 | 85.2 | 92.1 | 93.3 | 94.6 | 96.4 | 98.3 | 99.0 | 100.1 | 100.4 | 103.1 | 103.2 | 103.0 | 99.2 | 143.7 |
| 16000 | 84.0 | 90.5 | 92.8 | 94.4 | 96.8 | 98.8 | 97.5 | 99.1 | 99.2 | 101.6 | 100.9 | 100.9 | 97.2 | 143.9 |
| 20000 | 78.5 | 87.1 | 89.1 | 91.7 | 95.7 | 97.3 | 95.0 | 96.1 | 97.0 | 98.7 | 97.6 | 98.3 | 94.3 | 143.1 |
| 25000 | 77.0 | 82.4 | 85.9 | 87.2 | 92.1 | 93.7 | 91.8 | 91.3 | 94.0 | 93.5 | 93.5 | 94.0 | 92.1 | 141.6 |
| 31500 | 75.3 | 78.2 | 83.4 | 85.8 | 87.1 | 87.8 | 88.0 | 88.3 | 90.9 | 92.5 | 90.8 | 87.8 | 86.4 | 141.2 |
| 40000 | 70.3 | 73.6 | 78.3 | 80.6 | 85.1 | 86.0 | 82.8 | 83.4 | 85.3 | 87.3 | 85.5 | 82.6 | 81.8 | 140.7 |
| 50000 | 63.1 | 66.5 | 70.7 | 73.9 | 76.6 | 78.8 | 77.8 | 76.8 | 80.8 | 81.3 | 79.8 | 77.3 | 76.7 | 139.0 |
| 63000 | 57.8 | 59.8 | 64.4 | 67.3 | 68.9 | 70.6 | 72.3 | 70.7 | 76.6 | 73.8 | 74.3 | 72.3 | 70.6 | 138.2 |
| 80000 | 51.6 | 53.4 | 57.9 | 62.9 | 62.0 | 64.5 | 64.7 | 65.0 | 70.4 | 68.4 | 70.8 | 64.2 | 62.7 | 139.2 |

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ASPL 101.3 104.1 105.1 105.4 107.1 109.2 109.9 112.7 116.0 121.1 121.9 121.6 118.7 158.6

TEST DATE 03-16-78 TAPE NO. N300 ALPHA 3859 TANB 37.94
LOCATION C41 ANECH CH AERO. RDG. ADH158 PAMB 29.5700 RELHUM 23.20

MODEL TEST POINT 3006 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 110.1 SQ CM (17.07 SQ IN) - MODEL 0. FREE-JET SPEED 0. M/SEC (0. FPS)

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X30060

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 79.5 | 85.1 | 83.3 | 84.1 | 85.2 | 87.8 | 89.5 | 90.9 | 93.8 | 99.4 | 103.8 | 106.7 | 108.4 | 140.2 |
| 315 | 81.1 | 83.7 | 84.9 | 86.0 | 87.3 | 89.4 | 89.8 | 91.7 | 95.7 | 102.3 | 106.1 | 108.6 | 107.7 | 142.1 |
| 400 | 83.2 | 85.4 | 85.7 | 86.0 | 87.3 | 89.7 | 90.8 | 92.8 | 97.2 | 106.0 | 108.9 | 110.3 | 108.3 | 144.2 |
| 500 | 84.0 | 86.0 | 86.0 | 87.3 | 88.4 | 90.8 | 91.9 | 93.8 | 98.8 | 108.4 | 111.3 | 111.9 | 109.3 | 146.1 |
| 630 | 84.6 | 87.4 | 88.4 | 88.2 | 92.0 | 92.4 | 93.5 | 95.9 | 100.4 | 108.7 | 111.9 | 111.8 | 108.9 | 146.4 |
| 800 | 88.9 | 87.9 | 89.4 | 90.7 | 91.3 | 93.2 | 94.3 | 97.5 | 101.7 | 109.0 | 111.6 | 110.8 | 108.7 | 146.3 |
| 1000 | 92.5 | 92.5 | 94.3 | 92.8 | 92.7 | 94.8 | 95.7 | 98.8 | 103.6 | 109.6 | 110.4 | 107.6 | 146.2 | |
| 1250 | 88.1 | 92.2 | 93.4 | 93.2 | 94.3 | 96.7 | 98.8 | 100.0 | 104.2 | 109.5 | 111.4 | 110.3 | 107.0 | 146.4 |
| 1600 | 90.2 | 91.1 | 91.6 | 92.4 | 93.7 | 95.6 | 97.2 | 99.9 | 105.1 | 111.0 | 111.2 | 109.6 | 106.8 | 146.4 |
| 2000 | 90.7 | 92.5 | 93.2 | 92.5 | 93.1 | 95.4 | 97.1 | 101.0 | 105.0 | 111.1 | 110.8 | 109.2 | 104.5 | 146.7 |
| 2500 | 89.9 | 91.7 | 92.7 | 93.2 | 93.8 | 96.1 | 98.0 | 100.9 | 105.9 | 111.6 | 110.0 | 108.9 | 104.1 | 146.6 |
| 3150 | 90.4 | 92.7 | 93.3 | 93.3 | 94.6 | 96.7 | 98.3 | 102.0 | 105.8 | 110.2 | 109.0 | 108.2 | 103.7 | 145.9 |
| 4000 | 90.8 | 91.9 | 92.9 | 93.1 | 93.9 | 96.3 | 97.5 | 102.1 | 104.9 | 108.8 | 108.2 | 106.8 | 102.5 | 145.0 |
| 5000 | 90.1 | 92.5 | 92.6 | 93.2 | 94.5 | 96.3 | 98.6 | 102.2 | 104.8 | 108.7 | 107.8 | 106.2 | 102.4 | 145.1 |
| 6300 | 88.4 | 92.8 | 93.6 | 93.3 | 94.5 | 97.9 | 98.6 | 101.8 | 103.9 | 108.0 | 106.7 | 106.0 | 102.9 | 144.7 |
| 8000 | 89.0 | 93.7 | 93.3 | 94.2 | 95.2 | 97.6 | 98.9 | 101.8 | 103.5 | 106.6 | 106.4 | 105.8 | 101.8 | 144.6 |
| 10000 | 87.7 | 93.8 | 94.7 | 94.3 | 95.6 | 98.5 | 99.2 | 101.5 | 102.3 | 105.4 | 105.3 | 105.1 | 101.2 | 144.5 |
| 12500 | 85.2 | 92.1 | 93.3 | 94.6 | 96.4 | 98.3 | 99.0 | 100.1 | 100.4 | 103.1 | 103.2 | 103.0 | 99.2 | 143.7 |
| 16000 | 84.0 | 90.5 | 92.8 | 94.4 | 96.8 | 98.8 | 97.5 | 99.1 | 99.2 | 101.6 | 100.9 | 100.9 | 97.2 | 143.9 |
| 20000 | 78.5 | 87.1 | 89.1 | 91.7 | 95.7 | 97.3 | 95.0 | 96.1 | 97.0 | 97.6 | 98.3 | 94.3 | 143.1 | |
| 25000 | 77.0 | 82.4 | 85.9 | 87.2 | 92.1 | 93.7 | 91.8 | 91.3 | 94.0 | 93.5 | 93.5 | 94.0 | 92.1 | 141.6 |
| 31500 | 75.3 | 78.2 | 83.4 | 85.8 | 87.1 | 87.8 | 88.0 | 88.3 | 90.9 | 92.5 | 90.8 | 87.8 | 86.4 | 141.2 |
| 40000 | 70.3 | 73.6 | 78.3 | 80.6 | 85.1 | 86.0 | 82.6 | 83.4 | 85.3 | 87.3 | 85.5 | 82.6 | 81.3 | 140.7 |
| 50000 | 63.1 | 66.5 | 70.7 | 73.9 | 75.6 | 78.8 | 77.8 | 76.8 | 80.8 | 81.3 | 79.8 | 77.3 | 76.7 | 139.0 |
| 63000 | 57.8 | 59.8 | 64.4 | 67.3 | 68.9 | 70.6 | 72.3 | 70.7 | 76.6 | 73.8 | 74.3 | 72.3 | 70.8 | 138.2 |
| 80000 | 51.6 | 53.4 | 57.9 | 62.9 | 62.0 | 64.5 | 64.7 | 65.0 | 70.4 | 68.4 | 70.8 | 64.2 | 62.7 | 135.2 |
| GASPL | 101.3 | 104.1 | 105.1 | 105.4 | 107.1 | 109.2 | 109.9 | 112.7 | 116.0 | 121.1 | 121.9 | 121.6 | 118.7 | 158.6 |

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OF POOR QUALITY

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES TURBULANCE CORRECTION - YES

TEST DATE 03-16-78 TAPE NO. N300 ALPHA 3839 TAPB 37.94
 LOCATION C41 ANECH CH AERO. RDG. ADH158 PAMB 29.5700 BELHUM 23.20

MODEL TEST POINT 3006 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 110.1 SQ CM (17.07 SQ IN) - MODEL 0. FREE-JET SPEED 0. M/SEC (0. FPS)

07/19/79 18.286

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X30065

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 63.7 | 67.3 | 70.4 | 70.4 | 71.9 | 74.4 | 75.4 | 76.9 | 81.1 | 89.6 | 91.0 | 89.4 | 83.5 | 165.2 |
| 63 | 64.3 | 68.6 | 70.7 | 71.2 | 75.5 | 76.0 | 78.9 | 78.9 | 82.7 | 89.9 | 91.5 | 89.3 | 93.1 | 165.6 |
| 80 | 68.5 | 69.1 | 71.7 | 73.7 | 74.7 | 76.7 | 77.7 | 80.5 | 84.0 | 90.2 | 91.3 | 88.2 | 82.7 | 165.4 |
| 100 | 72.0 | 73.6 | 76.5 | 75.8 | 76.0 | 78.3 | 79.0 | 81.8 | 85.8 | 90.7 | 90.3 | 87.7 | 81.4 | 165.3 |
| 125 | 67.5 | 73.2 | 75.6 | 76.1 | 77.6 | 80.1 | 80.1 | 82.8 | 86.3 | 90.5 | 90.8 | 87.4 | 80.6 | 165.6 |
| 160 | 69.5 | 72.0 | 73.6 | 75.1 | 76.9 | 78.8 | 80.4 | 82.6 | 87.1 | 90.8 | 90.4 | 86.5 | 72.9 | 165.5 |
| 200 | 69.7 | 73.1 | 75.0 | 75.1 | 76.1 | 78.6 | 80.1 | 83.6 | 87.8 | 91.8 | 89.8 | 86.8 | 77.3 | 165.8 |
| 250 | 68.6 | 72.1 | 74.3 | 75.6 | 75.6 | 79.1 | 80.8 | 83.3 | 87.5 | 92.0 | 88.7 | 85.1 | 76.3 | 165.8 |
| 315 | 68.7 | 72.8 | 74.6 | 75.4 | 77.1 | 79.4 | 80.9 | 84.1 | 87.1 | 90.2 | 87.3 | 83.9 | 76.1 | 165.1 |
| 400 | 68.6 | 71.6 | 73.9 | 74.9 | 76.2 | 78.7 | 80.2 | 83.9 | 85.9 | 88.5 | 86.0 | 81.6 | 73.0 | 164.1 |
| 500 | 67.5 | 71.9 | 73.5 | 74.8 | 76.9 | 79.1 | 80.9 | 83.8 | 85.5 | 88.1 | 85.2 | 80.6 | 71.9 | 164.2 |
| 630 | 65.4 | 71.9 | 74.0 | 74.6 | 76.4 | 79.9 | 80.5 | 83.1 | 84.4 | 87.0 | 83.7 | 79.8 | 71.4 | 163.9 |
| 800 | 65.7 | 72.5 | 73.6 | 75.4 | 77.0 | 79.6 | 80.7 | 83.0 | 83.8 | 85.5 | 83.0 | 78.1 | 69.3 | 163.7 |
| 1000 | 64.0 | 72.5 | 75.0 | 75.6 | 78.5 | 80.6 | 81.0 | 82.8 | 82.5 | 84.1 | 81.7 | 77.9 | 67.7 | 163.6 |
| 1250 | 61.4 | 70.8 | 73.6 | 76.0 | 78.4 | 80.5 | 81.0 | 81.5 | 80.7 | 81.7 | 79.4 | 75.3 | 64.6 | 162.9 |
| 1600 | 59.8 | 69.1 | 73.2 | 76.0 | 79.0 | 81.2 | 79.7 | 80.7 | 79.5 | 80.2 | 76.7 | 72.4 | 60.7 | 163.0 |
| 2000 | 53.7 | 65.5 | 69.5 | 73.4 | 78.2 | 80.0 | 77.4 | 77.8 | 77.5 | 77.1 | 72.8 | 68.5 | 55.3 | 162.3 |
| 2500 | 51.1 | 60.2 | 66.1 | 68.9 | 74.6 | 76.5 | 74.3 | 72.9 | 74.2 | 71.3 | 67.6 | 62.0 | 48.7 | 160.7 |
| 3150 | 46.8 | 54.3 | 62.4 | 66.7 | 69.0 | 70.1 | 69.9 | 69.2 | 70.0 | 68.6 | 62.3 | 51.6 | 35.4 | 160.4 |
| 4000 | 36.4 | 45.8 | 54.4 | 59.0 | 64.8 | 66.2 | 62.4 | 61.8 | 61.4 | 59.5 | 51.6 | 38.3 | 17.1 | 159.9 |
| 5000 | 19.9 | 31.5 | 40.9 | 47.3 | 51.8 | 54.6 | 53.0 | 50.2 | 51.0 | 46.3 | 36.5 | 18.7 | | 158.1 |
| 6300 | 11.6 | 23.5 | 30.9 | 34.9 | 37.3 | 38.3 | 34.3 | 34.3 | 35.7 | 25.6 | 14.1 | | | 157.4 |
| 8000 | | | 8.7 | 11.4 | 15.0 | 14.1 | 10.8 | 9.6 | | | | | | 158.3 |

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OF POOR QUALITY

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|------|------|-------|
| CASPL | 79.6 | 83.8 | 86.2 | 87.3 | 89.4 | 91.7 | 92.2 | 94.6 | 97.2 | 101.3 | 100.4 | 97.4 | 90.7 | 177.4 |
| PWL | 83.5 | 89.7 | 93.2 | 95.4 | 98.7 | 100.7 | 100.0 | 101.4 | 102.5 | 105.5 | 103.0 | 99.1 | 90.4 | |
| PWL | 84.1 | 89.7 | 93.2 | 95.4 | 98.7 | 100.7 | 100.5 | 101.4 | 103.1 | 105.5 | 103.0 | 99.1 | 90.4 | |

DIAMETER RATIO 9.056 FREQUENCY SHIFT -10

TEST DATE 03-16-78 TAPE NO. N300 ALPHA SB59 TAMB 37.94
 LOCATION C41 ANECH CH AERG. RDG. ADH158 PAMB 29.5700 RELHUM 23.20

MODEL TEST POINT 3006 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 0. M/SEC (0. FPS)

07/19/79 15.286

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X30070
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

ORIGINAL PAGE IS
OF POOR QUALITY

| | | | | | | | | | | | | | | | |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 76.4 | 79.5 | 79.5 | 80.3 | 81.1 | 83.0 | 84.9 | 86.6 | 88.6 | 88.6 | 95.9 | 100.8 | 103.7 | 102.8 | 136.8 |
| 315 | 77.8 | 79.6 | 80.5 | 80.7 | 83.0 | 84.6 | 85.3 | 87.2 | 91.7 | 98.4 | 102.4 | 105.3 | 102.5 | 138.2 | |
| 400 | 79.6 | 80.9 | 82.1 | 82.0 | 83.0 | 85.2 | 86.5 | 88.5 | 92.7 | 102.3 | 105.4 | 106.1 | 100.5 | 140.0 | |
| 500 | 80.5 | 81.8 | 84.4 | 83.3 | 85.9 | 86.5 | 87.9 | 89.6 | 94.3 | 104.1 | 107.7 | 106.7 | 98.1 | 141.4 | |
| 630 | 81.1 | 82.9 | 83.9 | 84.2 | 83.5 | 87.6 | 89.0 | 91.9 | 96.4 | 104.7 | 108.6 | 106.5 | 94.2 | 142.1 | |
| 800 | 83.9 | 82.9 | 85.4 | 86.5 | 86.8 | 89.2 | 90.6 | 93.7 | 97.9 | 105.5 | 109.1 | 104.6 | 91.7 | 142.2 | |
| 1000 | 85.5 | 84.5 | 87.3 | 86.8 | 87.9 | 90.3 | 91.4 | 94.8 | 100.1 | 105.9 | 107.5 | 102.2 | 90.3 | 141.6 | |
| 1250 | 84.6 | 86.4 | 87.9 | 88.5 | 89.8 | 91.9 | 93.0 | 95.7 | 100.9 | 106.3 | 108.6 | 101.3 | 89.9 | 142.3 | |
| 1600 | 85.7 | 84.8 | 87.1 | 88.4 | 90.0 | 92.6 | 93.5 | 97.4 | 102.1 | 107.5 | 108.4 | 100.4 | 90.4 | 142.8 | |
| 2000 | 85.2 | 86.0 | 88.5 | 88.0 | 89.3 | 91.7 | 93.8 | 97.5 | 103.5 | 108.6 | 107.3 | 99.5 | 91.5 | 143.0 | |
| 2500 | 85.9 | 86.9 | 88.2 | 88.9 | 89.5 | 91.9 | 94.5 | 98.2 | 102.9 | 109.1 | 107.2 | 99.9 | 90.9 | 143.3 | |
| 3150 | 86.9 | 87.5 | 88.3 | 89.3 | 90.3 | 93.2 | 95.1 | 99.3 | 103.5 | 107.7 | 106.5 | 100.2 | 90.7 | 142.8 | |
| 4000 | 87.3 | 86.6 | 88.6 | 89.1 | 90.7 | 93.0 | 94.9 | 98.3 | 102.9 | 106.6 | 105.9 | 98.3 | 89.3 | 142.1 | |
| 5000 | 88.6 | 87.3 | 89.0 | 89.8 | 90.8 | 93.7 | 96.1 | 99.3 | 102.3 | 106.5 | 105.3 | 98.2 | 89.4 | 142.0 | |
| 6300 | 88.9 | 88.6 | 90.1 | 90.3 | 91.3 | 94.4 | 96.1 | 99.3 | 101.9 | 105.7 | 104.8 | 98.3 | 90.2 | 141.9 | |
| 8000 | 91.6 | 90.7 | 91.3 | 90.7 | 92.5 | 94.9 | 96.2 | 99.0 | 102.0 | 104.7 | 104.2 | 98.3 | 90.8 | 141.9 | |
| 10000 | 90.2 | 91.6 | 92.3 | 92.1 | 93.4 | 96.6 | 96.5 | 98.5 | 101.1 | 104.4 | 103.6 | 99.1 | 92.0 | 142.3 | |
| 12500 | 88.0 | 90.2 | 91.3 | 92.4 | 93.9 | 95.8 | 96.0 | 97.9 | 99.7 | 102.9 | 101.5 | 98.3 | 91.0 | 141.9 | |
| 16000 | 86.8 | 88.8 | 90.4 | 91.7 | 93.9 | 96.4 | 95.3 | 97.7 | 98.0 | 101.9 | 100.0 | 96.5 | 90.2 | 142.3 | |
| 20000 | 81.8 | 86.1 | 88.2 | 89.5 | 92.8 | 95.1 | 92.8 | 94.9 | 96.9 | 98.5 | 96.6 | 94.4 | 88.6 | 141.6 | |
| 25000 | 80.1 | 81.4 | 85.5 | 86.3 | 90.4 | 91.8 | 90.3 | 90.8 | 94.1 | 94.1 | 92.8 | 90.5 | 86.5 | 140.5 | |
| 31500 | 78.4 | 78.2 | 82.9 | 84.6 | 85.6 | 86.4 | 86.6 | 87.8 | 91.0 | 93.1 | 90.1 | 85.8 | 81.9 | 140.7 | |
| 40000 | 73.4 | 73.7 | 77.4 | 79.4 | 84.1 | 84.6 | 81.2 | 83.2 | 86.2 | 87.1 | 84.8 | 80.4 | 77.6 | 140.1 | |
| 50000 | 66.0 | 66.5 | 70.3 | 73.0 | 75.4 | 77.4 | 76.1 | 81.3 | 80.3 | 79.1 | 75.3 | 71.7 | 138.1 | | |
| 63000 | 60.4 | 60.6 | 63.7 | 66.6 | 66.7 | 68.4 | 70.6 | 69.2 | 75.1 | 72.9 | 71.6 | 69.1 | 66.1 | 136.9 | |
| 80000 | 54.4 | 53.5 | 57.7 | 60.9 | 60.4 | 63.0 | 62.8 | 63.0 | 69.7 | 66.7 | 66.1 | 60.3 | 57.3 | 137.3 | |
| GASPL | 99.5 | 100.0 | 101.5 | 102.0 | 104.0 | 106.1 | 106.9 | 109.8 | 113.5 | 118.4 | 119.1 | 115.3 | 108.7 | 155.5 | |

TEST DATE 03-16-78 TAPE NO. N300 ALPHA SB59 TAMB 39.38
LOCATION C41 ANECH CH AERO. RDG. ADH154 PAMB 29.5550 RELHUM 22.40

MODEL TEST POINT 3007 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 110.1 SQ CM (17.07 SQ IN) - MODEL 91.14 M/SEC (299.0 FPS) FREE-JET SPEED

07/19/79 18.286

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X30070

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

| | | | | | | | | | | | | | |
|-------|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|
| 50 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 63 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 80 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 100 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 125 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 160 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 200 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 250 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 315 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 400 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 500 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 630 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 800 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 1000 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 1250 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 1600 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 2000 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 2500 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 3150 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 4000 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 5000 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 6300 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 8000 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 10000 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 12500 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 16000 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 20000 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 25000 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 31500 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 40000 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 50000 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 63000 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |
| 80000 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | PWL |

CA SPL 104.8 104.7 105.4 105.9 107.0 108.3 107.8 109.6 113.9 118.0 118.3 115.8 112.3 156.4

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 299.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-16-78 TAPE NO. N300 ALPHA 3859 TAMB 39.38
LOCATION C41 ANECH CH AERO. RDG. ADH154 PAMB 29.5550 RELHUM 22.40

MODEL TEST POINT 3007 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 110.1 SQ CM (17.07 SQ IN) - MODEL 91.14 M/SEC (299.0 FPS) FREE-JET SPEED

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OF POOR QUALITY

07/19/79 18.286

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X30075

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 64.6 | 66.6 | 67.9 | 68.9 | 70.7 | 70.3 | 70.5 | 70.8 | 76.9 | 83.8 | 86.3 | 83.6 | 71.5 | 159.6 |
| 63 | 65.8 | 67.7 | 70.3 | 70.6 | 78.7 | 71.4 | 71.6 | 73.1 | 78.6 | 84.7 | 87.0 | 82.3 | 70.7 | 160.1 |
| 80 | 68.3 | 70.4 | 71.1 | 72.0 | 71.6 | 73.0 | 73.1 | 74.8 | 80.9 | 85.3 | 85.7 | 80.5 | 70.8 | 159.6 |
| 100 | 69.0 | 68.7 | 71.3 | 72.3 | 72.7 | 74.1 | 74.0 | 75.9 | 81.8 | 85.7 | 86.7 | 79.3 | 69.8 | 160.2 |
| 125 | 70.3 | 70.1 | 73.1 | 74.0 | 74.6 | 75.8 | 75.6 | 76.8 | 83.0 | 86.9 | 86.5 | 78.4 | 70.1 | 160.8 |
| 160 | 69.4 | 72.0 | 73.7 | 73.9 | 74.6 | 76.4 | 76.0 | 78.5 | 84.5 | 88.1 | 85.4 | 77.5 | 71.1 | 161.3 |
| 200 | 70.3 | 70.3 | 72.7 | 73.4 | 74.1 | 76.5 | 76.4 | 78.6 | 84.0 | 88.6 | 85.3 | 77.9 | 70.3 | 161.6 |
| 250 | 69.4 | 71.1 | 73.9 | 74.3 | 74.3 | 75.7 | 77.1 | 79.3 | 84.6 | 87.2 | 84.7 | 78.1 | 69.8 | 161.4 |
| 315 | 69.7 | 71.8 | 73.4 | 74.5 | 75.0 | 77.0 | 77.7 | 80.4 | 84.1 | 85.2 | 84.1 | 76.1 | 68.1 | 161.2 |
| 400 | 70.3 | 72.0 | 73.2 | 74.3 | 75.4 | 76.9 | 77.6 | 80.0 | 83.7 | 86.3 | 83.5 | 75.9 | 67.8 | 161.5 |
| 500 | 70.1 | 70.8 | 73.4 | 74.9 | 75.6 | 77.7 | 78.9 | 80.6 | 83.7 | 85.8 | 83.2 | 76.1 | 68.2 | 161.9 |
| 630 | 71.0 | 71.1 | 73.6 | 75.5 | 76.2 | 78.7 | 79.2 | 80.9 | 84.0 | 84.8 | 82.5 | 75.7 | 68.0 | 162.2 |
| 800 | 70.8 | 72.1 | 74.5 | 76.1 | 77.8 | 79.7 | 79.8 | 81.0 | 83.2 | 84.7 | 82.0 | 76.6 | 69.2 | 162.9 |
| 1000 | 73.0 | 74.1 | 75.8 | 77.6 | 78.9 | 81.6 | 80.2 | 80.6 | 82.2 | 83.5 | 80.2 | 75.9 | 67.9 | 163.0 |
| 1250 | 71.1 | 74.7 | 76.5 | 78.0 | 79.5 | 81.0 | 80.0 | 80.2 | 81.2 | 83.2 | 79.2 | 74.3 | 66.8 | 163.4 |
| 1600 | 68.1 | 72.7 | 75.2 | 78.3 | 80.1 | 81.8 | 79.8 | 80.4 | 81.1 | 80.7 | 76.5 | 72.4 | 64.4 | 163.8 |
| 2000 | 67.9 | 72.3 | 75.1 | 76.3 | 79.3 | 80.8 | 79.6 | 78.1 | 79.5 | 77.4 | 73.5 | 68.5 | 60.7 | 163.7 |
| 2500 | 61.1 | 68.4 | 72.0 | 73.0 | 76.9 | 77.5 | 75.4 | 74.4 | 75.9 | 75.3 | 69.0 | 61.2 | 51.6 | 163.0 |
| 3150 | 56.0 | 61.3 | 67.4 | 70.5 | 71.6 | 70.7 | 69.9 | 71.5 | 69.2 | 62.8 | 53.2 | 41.3 | 162.2 | |
| 4000 | 48.1 | 53.4 | 61.1 | 62.9 | 67.9 | 67.8 | 63.4 | 63.3 | 64.0 | 58.9 | 52.0 | 40.4 | 22.1 | 162.1 |
| 5000 | 33.3 | 41.3 | 49.3 | 51.5 | 54.6 | 56.1 | 53.7 | 51.1 | 54.1 | 45.5 | 36.4 | 22.0 | 160.4 | |
| 6300 | 8.1 | 19.9 | 30.1 | 35.2 | 36.7 | 38.2 | 39.2 | 34.6 | 37.4 | 26.8 | 14.6 | | 159.0 | |
| 8000 | | | 2.2 | 11.8 | 13.8 | 16.5 | 14.5 | 10.2 | 7.7 | | | | 157.7 | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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QASPL 82.1 84.0 86.2 87.6 89.3 90.7 90.1 91.4 95.0 97.9 96.5 90.8 81.5 175.3
 PNL 89.2 92.6 95.5 97.0 99.3 100.6 99.0 99.8 102.2 103.0 100.3 94.1 85.3
 PNL 90.4 93.7 95.5 97.0 100.3 100.6 99.5 99.5 102.9 103.0 100.3 94.1 85.3

DIAMETER RATIO 9.056 FREQUENCY SHIFT -10

TEST DATE 03-16-78 TAPE NO. N300 ALPHA SB59 TAMB 39.38
 LOCATION C41 ANECH CH AERG. RDG. ADH154 PAMB 29.5550 RELHUM 22.40

MODEL TEST POINT 3007 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ.IN) - FULL SIZE 91.14 M/SEC (299.0 FPS) FREE-JET SPEED

07/19/79 18.286

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FM0DL X30080
BACKGROUND FJB400-FM0DL X01400

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PHL

| | | | | | | | | | | | | | | |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 75.8 | 78.0 | 78.0 | 79.3 | 80.2 | 81.9 | 83.4 | 85.7 | 87.8 | 88.3 | 89.8 | 102.8 | 101.1 | 135.8 |
| 315 | 77.0 | 78.6 | 79.6 | 80.1 | 81.0 | 83.8 | 84.2 | 86.4 | 89.2 | 97.4 | 101.6 | 104.1 | 100.5 | 137.0 |
| 400 | 79.1 | 80.4 | 80.7 | 81.2 | 82.2 | 84.7 | 85.0 | 87.0 | 92.3 | 101.3 | 104.7 | 105.1 | 97.7 | 139.0 |
| 500 | 79.8 | 80.8 | 84.1 | 82.6 | 86.3 | 85.8 | 87.0 | 89.9 | 93.2 | 103.1 | 106.7 | 104.2 | 94.3 | 140.1 |
| 630 | 80.2 | 82.2 | 83.5 | 83.3 | 86.0 | 86.7 | 88.1 | 90.8 | 95.6 | 104.0 | 108.1 | 103.0 | 92.9 | 141.1 |
| 800 | 82.8 | 82.0 | 84.1 | 85.1 | 85.7 | 87.8 | 89.5 | 92.9 | 97.2 | 105.3 | 108.1 | 100.8 | 91.7 | 141.2 |
| 1000 | 84.2 | 83.2 | 85.5 | 85.2 | 86.8 | 89.5 | 90.6 | 94.3 | 99.0 | 105.1 | 106.5 | 97.7 | 89.3 | 140.4 |
| 1250 | 83.6 | 86.1 | 87.6 | 87.1 | 88.2 | 90.6 | 91.2 | 95.4 | 99.9 | 105.5 | 106.6 | 97.3 | 89.2 | 140.8 |
| 1600 | 84.9 | 84.0 | 86.3 | 86.8 | 88.7 | 91.5 | 92.7 | 96.6 | 101.4 | 106.7 | 106.4 | 96.8 | 89.3 | 141.5 |
| 2000 | 84.4 | 84.9 | 87.2 | 87.2 | 88.5 | 90.6 | 93.3 | 97.2 | 102.5 | 107.8 | 105.5 | 96.7 | 89.7 | 141.9 |
| 2500 | 84.8 | 86.1 | 87.4 | 87.1 | 89.2 | 90.8 | 94.0 | 97.4 | 102.2 | 108.3 | 105.0 | 97.6 | 89.9 | 142.1 |
| 3150 | 85.4 | 86.2 | 87.5 | 88.7 | 89.5 | 92.4 | 94.3 | 99.0 | 103.0 | 107.4 | 105.3 | 98.0 | 89.7 | 142.1 |
| 4000 | 85.5 | 86.1 | 87.9 | 88.8 | 89.6 | 92.8 | 94.4 | 98.4 | 102.4 | 106.3 | 104.2 | 96.3 | 89.3 | 141.3 |
| 5000 | 86.9 | 87.0 | 88.3 | 89.5 | 90.5 | 93.2 | 95.1 | 99.0 | 102.3 | 106.5 | 103.3 | 96.4 | 88.9 | 141.5 |
| 6300 | 87.7 | 88.3 | 89.6 | 89.8 | 90.8 | 94.6 | 95.6 | 98.8 | 101.7 | 105.2 | 103.0 | 96.8 | 89.7 | 141.2 |
| 8000 | 90.1 | 91.0 | 90.3 | 90.9 | 92.0 | 94.6 | 95.7 | 98.6 | 101.3 | 104.2 | 102.9 | 97.3 | 90.6 | 141.2 |
| 10000 | 89.4 | 91.1 | 91.7 | 92.3 | 92.9 | 95.8 | 95.5 | 99.0 | 100.8 | 103.4 | 102.1 | 97.6 | 91.5 | 141.5 |
| 12500 | 87.5 | 89.2 | 90.3 | 92.2 | 92.9 | 95.6 | 95.0 | 97.9 | 99.2 | 101.9 | 100.3 | 97.1 | 91.5 | 141.1 |
| 16000 | 86.3 | 88.1 | 89.6 | 91.9 | 93.9 | 96.4 | 96.1 | 97.4 | 98.0 | 100.9 | 98.7 | 95.7 | 90.7 | 141.8 |
| 20000 | 81.5 | 86.4 | 86.9 | 89.2 | 92.8 | 94.9 | 92.5 | 95.6 | 96.3 | 97.5 | 95.6 | 93.1 | 88.9 | 141.2 |
| 25000 | 80.1 | 81.9 | 84.7 | 85.8 | 90.6 | 92.0 | 90.1 | 90.6 | 93.8 | 92.8 | 91.8 | 89.3 | 87.6 | 140.2 |
| 31500 | 78.6 | 78.2 | 82.4 | 84.8 | 85.1 | 86.9 | 86.5 | 87.8 | 90.5 | 91.6 | 88.9 | 85.1 | 82.7 | 140.1 |
| 40000 | 73.6 | 73.9 | 77.4 | 79.1 | 83.4 | 84.6 | 81.4 | 82.9 | 85.7 | 85.8 | 83.3 | 79.4 | 78.1 | 139.5 |
| 50000 | 67.0 | 67.3 | 70.0 | 73.0 | 75.6 | 77.4 | 76.6 | 75.8 | 80.8 | 78.8 | 77.1 | 74.3 | 71.7 | 137.6 |
| 63000 | 60.6 | 60.3 | 63.5 | 66.8 | 66.9 | 68.4 | 70.4 | 69.2 | 75.4 | 71.6 | 70.1 | 68.1 | 66.1 | 136.3 |
| 80000 | 54.4 | 53.7 | 57.2 | 60.2 | 59.9 | 62.8 | 62.3 | 63.3 | 68.4 | 65.2 | 64.4 | 59.5 | 57.8 | 136.4 |
| GASPL | 98.4 | 99.5 | 100.7 | 101.6 | 103.9 | 105.7 | 106.1 | 109.5 | 113.0 | 117.8 | 117.7 | 113.1 | 107.1 | 154.6 |

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TEST DATE 03-16-78 TAPE NO. N300 ALPHA SB59 TAMB 39.38
LOCATION C41 ANECH CH AERO. RDG. ADH153 PAMB 29.5550 RELHUM 22.40

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 110.1 SQ CM (17.07 SQ IN) - MODEL 118.26 M/SEC (388.0 FPS)
6 3008

07/19/79 18.286

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X30080

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | | | | | | | | | | | | | | |
| 315 | 82.9 | 83.8 | 82.5 | 82.3 | 81.7 | 81.9 | 81.6 | 82.2 | 87.3 | 93.7 | 97.3 | 100.2 | 98.3 | 133.6 |
| 400 | 84.5 | 84.8 | 84.4 | 83.4 | 83.9 | 84.9 | 84.1 | 85.1 | 90.7 | 100.1 | 103.8 | 102.8 | 96.7 | 137.7 |
| 500 | 85.8 | 86.1 | 85.3 | 84.3 | 88.1 | 86.1 | 85.9 | 86.6 | 93.3 | 101.2 | 105.5 | 102.4 | 97.1 | 138.8 |
| 630 | 87.2 | 87.0 | 88.9 | 86.0 | 98.4 | 87.1 | 87.1 | 88.5 | 95.2 | 102.9 | 105.1 | 101.4 | 98.4 | 140.0 |
| 800 | 90.3 | 90.6 | 90.0 | 87.8 | 87.7 | 88.3 | 88.5 | 90.6 | 97.5 | 103.2 | 105.0 | 99.3 | 98.2 | 139.3 |
| 1000 | 90.1 | 88.2 | 88.9 | 88.5 | 88.9 | 90.1 | 89.7 | 92.1 | 98.5 | 103.7 | 105.2 | 98.9 | 97.9 | 139.6 |
| 1250 | 91.6 | 89.5 | 90.4 | 88.8 | 90.4 | 91.4 | 90.5 | 93.4 | 100.1 | 105.1 | 105.1 | 98.5 | 97.8 | 140.4 |
| 1600 | 91.0 | 92.4 | 92.6 | 90.8 | 91.0 | 92.5 | 92.2 | 94.8 | 101.5 | 106.5 | 104.6 | 98.7 | 98.5 | 141.2 |
| 2000 | 92.3 | 90.3 | 91.4 | 90.5 | 91.1 | 91.9 | 93.0 | 95.6 | 101.6 | 107.4 | 104.4 | 100.1 | 99.2 | 141.7 |
| 2500 | 91.8 | 91.3 | 92.4 | 91.1 | 92.0 | 92.3 | 94.1 | 96.2 | 102.9 | 107.0 | 105.3 | 100.9 | 99.5 | 142.1 |
| 3150 | 92.2 | 92.5 | 92.7 | 91.2 | 92.6 | 94.3 | 94.8 | 98.2 | 102.9 | 106.5 | 104.7 | 99.8 | 99.5 | 142.0 |
| 4000 | 92.7 | 92.7 | 92.9 | 92.9 | 93.2 | 95.2 | 95.4 | 98.1 | 103.1 | 106.8 | 103.9 | 100.0 | 99.2 | 142.2 |
| 5000 | 92.8 | 92.6 | 93.4 | 93.3 | 94.5 | 96.2 | 96.5 | 99.1 | 102.6 | 105.8 | 103.9 | 100.8 | 100.8 | 142.2 |
| 6300 | 94.1 | 93.5 | 94.0 | 94.2 | 94.8 | 97.6 | 97.1 | 99.9 | 102.6 | 105.2 | 104.5 | 102.1 | 102.7 | 142.7 |
| 8000 | 94.7 | 94.7 | 95.1 | 94.4 | 96.0 | 97.6 | 97.2 | 99.0 | 102.7 | 105.1 | 104.4 | 103.3 | 104.3 | 143.4 |
| 10000 | 96.9 | 97.2 | 95.7 | 95.4 | 96.9 | 98.8 | 97.3 | 99.6 | 102.2 | 104.7 | 103.7 | 103.7 | 105.1 | 144.2 |
| 12500 | 96.1 | 97.0 | 96.8 | 96.5 | 96.9 | 98.6 | 97.3 | 99.2 | 101.9 | 104.6 | 102.9 | 103.0 | 104.8 | 144.7 |
| 16000 | 93.6 | 94.5 | 94.9 | 95.8 | 98.4 | 99.4 | 97.5 | 99.0 | 100.8 | 101.5 | 99.8 | 100.0 | 102.4 | 144.6 |
| 20000 | 94.6 | 95.2 | 95.4 | 96.3 | 97.3 | 97.9 | 95.0 | 97.4 | 96.8 | 95.3 | 94.7 | 95.0 | 100.1 | 144.0 |
| 25000 | 89.3 | 93.0 | 92.1 | 93.0 | 95.2 | 95.0 | 91.6 | 90.7 | 96.3 | 96.9 | 94.4 | 93.4 | 97.6 | 144.1 |
| 31500 | 87.0 | 87.7 | 89.1 | 88.7 | 89.6 | 89.9 | 89.0 | 89.6 | 90.3 | 90.0 | 87.8 | 86.7 | 92.2 | 142.3 |
| 40000 | 84.7 | 83.2 | 86.0 | 86.9 | 87.9 | 87.6 | 82.9 | 83.0 | 86.9 | 84.4 | 82.8 | 82.8 | 86.8 | 142.7 |
| 50000 | 79.4 | 78.5 | 80.6 | 80.8 | 80.2 | 80.4 | 78.5 | 76.7 | 81.3 | 77.1 | 75.9 | 76.8 | 81.6 | 140.9 |
| 63000 | 71.8 | 70.9 | 72.3 | 73.7 | 71.5 | 71.4 | 71.9 | 69.3 | 78.1 | 74.6 | 74.1 | 72.1 | 77.0 | 140.2 |
| 80000 | 64.0 | 62.5 | 64.2 | 66.1 | 64.4 | 65.8 | 64.8 | 65.1 | 68.3 | 64.8 | 64.2 | 62.3 | 67.2 | 138.8 |
| GASPL | 105.6 | 105.8 | 105.9 | 105.7 | 107.5 | 108.2 | 107.3 | 109.4 | 113.6 | 117.4 | 117.0 | 114.3 | 113.9 | 156.0 |

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 388.00 REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-16-78 TAPE NO. N300 ALPHA SB59 TAMB 39.38
 LOCATION C41 ANECH CH AERO. RDG. ADH153 PAMB 29.5550 RELHUM 22.40

MODEL TEST POINT 3008 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 110.1 SQ CM (17.07 SQ IN) - MODEL 118.26 M/SEC (388.0 FPS) FREE-JET SPEED

07/19/79 18.286

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL - X30085

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 50 | 65.6 | 67.4 | 67.6 | 67.4 | 71.6 | 69.7 | 69.3 | 69.6 | 75.6 | 82.4 | 85.2 | 79.9 | 71.3 | 157.9 |
| 60 | 68.9 | 68.2 | 71.2 | 69.0 | 81.9 | 70.7 | 70.5 | 71.5 | 77.5 | 84.1 | 86.8 | 78.9 | 72.5 | 159.1 |
| 80 | 69.9 | 71.8 | 72.2 | 70.7 | 71.0 | 71.8 | 71.9 | 73.6 | 79.7 | 84.4 | 84.6 | 76.7 | 72.2 | 158.4 |
| 100 | 69.7 | 69.3 | 71.1 | 71.5 | 72.2 | 73.5 | 73.1 | 75.0 | 80.7 | 84.8 | 84.8 | 76.2 | 71.7 | 158.6 |
| 125 | 71.0 | 70.5 | 72.5 | 71.6 | 73.7 | 74.8 | 73.8 | 76.2 | 82.3 | 86.1 | 84.6 | 75.7 | 71.5 | 159.5 |
| 160 | 70.2 | 73.2 | 74.6 | 73.5 | 74.2 | 75.8 | 75.3 | 77.5 | 83.5 | 87.4 | 83.8 | 75.6 | 71.8 | 160.4 |
| 200 | 71.3 | 71.0 | 73.2 | 73.1 | 74.1 | 75.0 | 76.1 | 78.2 | 83.4 | 88.0 | 83.4 | 76.7 | 71.9 | 160.8 |
| 250 | 70.5 | 71.7 | 73.9 | 73.4 | 74.8 | 75.3 | 76.9 | 78.6 | 84.5 | 87.4 | 84.0 | 77.1 | 71.7 | 161.2 |
| 315 | 70.5 | 72.6 | 74.0 | 73.3 | 75.2 | 77.0 | 77.4 | 80.3 | 84.3 | 86.6 | 83.0 | 75.4 | 70.9 | 161.2 |
| 400 | 70.6 | 72.4 | 73.9 | 74.8 | 75.5 | 77.6 | 77.8 | 80.0 | 84.1 | 86.5 | 81.8 | 75.0 | 69.6 | 161.3 |
| 500 | 70.2 | 72.0 | 74.1 | 74.9 | 76.6 | 78.6 | 78.6 | 80.7 | 83.3 | 85.1 | 81.3 | 75.2 | 70.3 | 161.4 |
| 630 | 71.1 | 72.6 | 74.4 | 75.6 | 76.7 | 79.7 | 79.0 | 80.3 | 83.1 | 84.2 | 81.5 | 76.0 | 71.2 | 161.9 |
| 800 | 71.4 | 73.5 | 75.4 | 75.6 | 77.8 | 79.6 | 79.0 | 80.3 | 83.0 | 84.0 | 81.0 | 76.5 | 71.8 | 162.6 |
| 1000 | 73.3 | 75.9 | 76.0 | 76.6 | 78.7 | 80.8 | 79.2 | 80.9 | 82.5 | 83.4 | 80.1 | 76.5 | 71.6 | 163.3 |
| 1250 | 72.2 | 75.7 | 77.1 | 77.8 | 78.9 | 80.7 | 79.3 | 80.5 | 82.2 | 83.2 | 79.1 | 75.3 | 70.2 | 163.9 |
| 1600 | 69.4 | 73.1 | 75.3 | 77.3 | 80.6 | 81.8 | 79.7 | 80.6 | 81.2 | 80.1 | 75.6 | 71.4 | 65.9 | 163.7 |
| 2000 | 69.9 | 73.6 | 75.9 | 78.0 | 79.7 | 80.5 | 77.4 | 79.2 | 77.2 | 73.7 | 69.9 | 65.2 | 61.0 | 163.2 |
| 2500 | 63.3 | 70.7 | 72.3 | 74.6 | 77.7 | 77.0 | 74.0 | 72.3 | 76.5 | 74.7 | 68.5 | 61.4 | 54.3 | 163.3 |
| 3150 | 58.5 | 63.9 | 68.2 | 69.6 | 71.5 | 72.1 | 70.9 | 70.5 | 69.3 | 66.1 | 59.2 | 50.5 | 41.2 | 161.5 |
| 4000 | 50.8 | 55.4 | 62.1 | 65.4 | 67.6 | 67.7 | 62.6 | 61.5 | 63.0 | 56.6 | 48.9 | 38.5 | 22.2 | 161.9 |
| 5000 | 36.1 | 43.6 | 50.8 | 54.2 | 55.3 | 56.1 | 53.6 | 50.1 | 51.6 | 42.2 | 32.6 | 19.2 | 160.1 | |
| 6300 | 11.6 | 22.7 | 31.4 | 37.3 | 37.5 | 38.1 | 37.9 | 32.9 | 37.2 | 26.4 | 13.9 | 159.4 | 158.0 | |
| 10000 | | | 3.5 | 11.9 | 13.8 | 16.3 | 14.1 | 10.9 | 7.5 | | | | | |

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|-------|------|------|------|------|------|-------|------|------|-------|-------|------|------|------|-------|
| OASPL | 82.9 | 85.1 | 86.7 | 87.3 | 89.8 | 90.6 | 89.6 | 91.2 | 94.7 | 97.4 | 95.2 | 88.6 | 83.3 | 175.0 |
| PWL | 90.7 | 93.9 | 96.2 | 97.6 | 99.6 | 100.5 | 98.6 | 99.8 | 101.8 | 102.5 | 98.8 | 92.8 | 87.4 | |
| PNLT | 91.8 | 94.9 | 96.2 | 97.6 | 99.6 | 100.5 | 98.6 | 99.8 | 102.6 | 104.1 | 98.8 | 92.8 | 87.4 | |

DIAMETER RATIO 9.056 FREQUENCY SHIFT -10

TEST DATE 03-16-78 TAPE NO. N300 IALPHA S859 TAMB 39.38
LOCATION C41 ANECH CH AERG. RDG. ADH153 PAMB 29.5550 RELHUM 22.40

MODEL TEST POINT 3008 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 118.26 M/SEC (388.0 FPS) FREE-JET SPEED

07/19/79 18.286

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X30090
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 77.0 | 82.3 | 80.8 | 81.6 | 82.8 | 84.8 | 87.0 | 88.4 | 90.6 | 96.7 | 101.0 | 103.7 | 103.6 | 137.3 |
| 315 | 78.9 | 81.4 | 82.4 | 83.2 | 84.6 | 86.4 | 87.3 | 89.5 | 92.4 | 98.0 | 102.4 | 105.6 | 104.5 | 138.7 |
| 400 | 79.9 | 82.2 | 83.0 | 83.3 | 84.6 | 86.7 | 87.8 | 90.3 | 93.2 | 101.3 | 104.7 | 106.6 | 104.8 | 140.2 |
| 500 | 80.5 | 83.3 | 85.0 | 84.3 | 85.4 | 88.0 | 88.9 | 90.8 | 94.0 | 102.1 | 105.5 | 106.7 | 104.3 | 140.8 |
| 630 | 81.1 | 84.4 | 85.4 | 85.7 | 86.3 | 89.7 | 90.0 | 92.9 | 96.4 | 102.7 | 105.3 | 105.8 | 103.4 | 140.7 |
| 800 | 84.1 | 84.7 | 86.4 | 87.2 | 88.1 | 90.7 | 91.6 | 94.5 | 98.2 | 103.8 | 105.1 | 104.8 | 102.2 | 140.6 |
| 1000 | 86.2 | 86.5 | 89.1 | 88.3 | 89.2 | 91.8 | 92.7 | 95.6 | 99.6 | 103.9 | 104.8 | 104.4 | 101.3 | 140.7 |
| 1250 | 85.1 | 88.7 | 89.7 | 89.5 | 90.6 | 93.2 | 93.5 | 96.5 | 99.7 | 104.0 | 105.4 | 104.6 | 101.5 | 141.1 |
| 1600 | 86.7 | 88.1 | 88.6 | 89.6 | 90.5 | 93.1 | 94.0 | 96.9 | 100.6 | 104.2 | 105.4 | 104.4 | 102.1 | 141.3 |
| 2000 | 86.7 | 89.0 | 89.7 | 89.5 | 90.1 | 92.7 | 94.1 | 98.0 | 101.5 | 104.6 | 104.8 | 104.5 | 101.5 | 141.4 |
| 2500 | 86.1 | 88.4 | 90.2 | 90.2 | 90.8 | 93.1 | 95.5 | 97.9 | 101.2 | 105.1 | 105.2 | 104.9 | 101.4 | 141.8 |
| 3150 | 86.4 | 90.0 | 90.3 | 90.3 | 91.6 | 94.4 | 95.3 | 99.3 | 101.8 | 104.2 | 105.3 | 105.2 | 100.7 | 141.9 |
| 4000 | 86.5 | 88.9 | 90.1 | 90.4 | 91.4 | 93.6 | 95.7 | 98.6 | 101.1 | 103.8 | 104.9 | 104.1 | 99.5 | 141.4 |
| 5000 | 86.4 | 88.5 | 89.5 | 90.7 | 91.6 | 94.4 | 95.8 | 99.2 | 100.5 | 104.5 | 105.0 | 103.4 | 100.2 | 141.7 |
| 6300 | 85.1 | 87.8 | 89.8 | 90.5 | 91.5 | 94.9 | 96.1 | 98.8 | 100.4 | 103.2 | 104.5 | 104.0 | 101.7 | 141.6 |
| 8000 | 84.8 | 88.2 | 89.3 | 90.2 | 92.0 | 94.4 | 95.4 | 98.4 | 98.8 | 100.0 | 102.1 | 104.1 | 104.0 | 141.6 |
| 10000 | 83.2 | 88.0 | 89.7 | 90.6 | 92.4 | 95.0 | 95.2 | 98.3 | 98.8 | 101.1 | 103.0 | 103.6 | 100.9 | 141.5 |
| 12500 | 81.5 | 87.6 | 88.8 | 90.1 | 91.9 | 93.8 | 94.0 | 96.6 | 96.9 | 99.1 | 100.5 | 101.3 | 99.0 | 140.4 |
| 16000 | 80.0 | 86.0 | 87.8 | 89.4 | 91.3 | 93.3 | 92.5 | 95.4 | 95.7 | 98.1 | 98.4 | 99.9 | 96.9 | 140.4 |
| 20000 | 74.7 | 82.8 | 84.8 | 87.2 | 90.7 | 92.1 | 89.7 | 92.1 | 93.0 | 94.2 | 95.3 | 95.6 | 94.1 | 139.2 |
| 25000 | 73.5 | 78.9 | 82.2 | 83.5 | 87.8 | 89.5 | 87.0 | 87.5 | 90.5 | 90.2 | 91.3 | 92.0 | 91.8 | 138.3 |
| 31500 | 72.1 | 74.7 | 79.9 | 82.0 | 82.8 | 83.8 | 84.0 | 84.3 | 86.9 | 86.8 | 88.3 | 86.5 | 86.4 | 137.8 |
| 40000 | 66.6 | 69.9 | 74.6 | 76.6 | 80.8 | 81.5 | 78.1 | 79.6 | 82.3 | 83.5 | 83.5 | 81.3 | 81.8 | 137.3 |
| 50000 | 59.9 | 62.5 | 66.5 | 69.9 | 72.6 | 73.8 | 73.3 | 72.8 | 77.8 | 77.3 | 77.3 | 76.5 | 75.9 | 135.5 |
| 63000 | 54.1 | 55.8 | 60.2 | 63.0 | 63.6 | 65.6 | 67.6 | 65.9 | 72.8 | 70.5 | 71.0 | 71.0 | 70.3 | 134.6 |
| 80000 | 47.6 | 49.2 | 53.7 | 57.4 | 56.8 | 59.2 | 59.5 | 60.5 | 66.6 | 63.9 | 67.3 | 63.0 | 62.9 | 135.3 |
| GASPL | 97.2 | 100.1 | 101.4 | 102.0 | 103.4 | 105.8 | 106.8 | 109.6 | 111.9 | 115.7 | 117.2 | 117.4 | 114.9 | 154.3 |

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TEST DATE 03-16-78 TAPE NO. N300 ALPHA SB59 TAMB 38.48
LOCATION C41 ANECH CH AERG. RDG. ADH157 PAMB 29.5700 RELHUM 22.60

MODEL TEST POINT 3009 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 110.1 SQ CM (17.07 SQ IN) - MODEL SIZE FREE-JET SPEED
6 0. M/SEC (0. FPS)

07/19/79 18.236

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FM00L X30095

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 60.2 | 64.5 | 67.4 | 67.4 | 68.9 | 71.6 | 72.4 | 73.9 | 76.4 | 83.4 | 85.2 | 84.2 | 78.5 | 159.8 |
| 63 | 60.8 | 65.6 | 67.7 | 68.7 | 72.7 | 73.2 | 73.4 | 75.9 | 76.7 | 83.9 | 85.3 | 83.3 | 77.6 | 159.8 |
| 80 | 63.8 | 65.9 | 68.7 | 70.2 | 71.5 | 74.2 | 75.0 | 77.5 | 80.5 | 84.9 | 84.8 | 82.2 | 76.2 | 159.8 |
| 100 | 65.8 | 67.6 | 71.3 | 71.3 | 72.5 | 75.3 | 76.0 | 78.5 | 81.8 | 85.0 | 84.3 | 81.7 | 75.2 | 159.8 |
| 125 | 64.5 | 69.7 | 71.8 | 72.3 | 73.8 | 76.6 | 76.8 | 79.3 | 81.8 | 85.0 | 84.8 | 81.7 | 75.1 | 160.2 |
| 160 | 66.0 | 69.0 | 70.6 | 72.4 | 73.6 | 76.4 | 77.1 | 79.6 | 82.6 | 85.1 | 84.7 | 81.3 | 75.4 | 160.4 |
| 200 | 65.7 | 69.6 | 71.6 | 72.1 | 73.1 | 75.8 | 77.1 | 80.6 | 83.3 | 85.3 | 83.8 | 81.1 | 74.3 | 160.5 |
| 250 | 64.8 | 68.8 | 71.8 | 72.6 | 73.6 | 76.1 | 76.3 | 80.3 | 82.8 | 85.5 | 83.9 | 81.1 | 73.6 | 160.9 |
| 315 | 64.7 | 70.1 | 71.6 | 72.9 | 74.2 | 77.2 | 77.9 | 81.4 | 83.1 | 84.2 | 83.6 | 80.9 | 72.1 | 161.0 |
| 400 | 64.3 | 68.6 | 71.1 | 72.2 | 73.7 | 76.2 | 76.0 | 80.4 | 82.1 | 83.5 | 82.8 | 79.1 | 70.0 | 160.5 |
| 500 | 63.8 | 67.9 | 70.2 | 72.3 | 73.6 | 76.0 | 77.9 | 80.8 | 81.2 | 83.8 | 82.5 | 77.9 | 69.6 | 160.8 |
| 630 | 62.1 | 66.9 | 70.3 | 71.9 | 73.4 | 76.9 | 78.0 | 80.2 | 80.9 | 82.3 | 81.5 | 77.9 | 70.2 | 160.8 |
| 800 | 61.4 | 67.0 | 69.6 | 71.4 | 73.8 | 76.3 | 77.2 | 80.0 | 80.3 | 81.0 | 80.8 | 77.3 | 69.1 | 160.7 |
| 1000 | 59.5 | 66.8 | 70.0 | 71.8 | 74.2 | 77.1 | 77.0 | 79.5 | 79.0 | 79.8 | 79.4 | 76.4 | 67.5 | 160.6 |
| 1250 | 57.6 | 66.3 | 69.1 | 71.5 | 73.9 | 76.0 | 76.0 | 78.0 | 77.2 | 77.7 | 76.6 | 73.5 | 64.4 | 159.5 |
| 1600 | 55.8 | 64.6 | 68.2 | 71.0 | 73.5 | 75.7 | 74.7 | 77.0 | 76.1 | 76.7 | 74.2 | 71.4 | 60.4 | 159.6 |
| 2000 | 50.0 | 61.2 | 65.3 | 68.9 | 73.2 | 74.7 | 72.2 | 73.8 | 73.5 | 72.6 | 70.6 | 68.8 | 55.0 | 158.3 |
| 2500 | 47.6 | 56.7 | 62.3 | 65.1 | 70.3 | 72.2 | 69.5 | 69.2 | 70.7 | 68.0 | 65.4 | 60.0 | 48.5 | 157.4 |
| 3150 | 43.5 | 50.8 | 58.9 | 62.9 | 64.7 | 66.1 | 65.9 | 65.2 | 66.0 | 64.9 | 59.8 | 50.3 | 35.4 | 156.9 |
| 4000 | 32.7 | 42.1 | 50.7 | 55.0 | 60.6 | 61.7 | 57.9 | 58.1 | 56.4 | 55.8 | 49.6 | 37.0 | 17.1 | 156.4 |
| 5000 | 16.6 | 27.5 | 36.7 | 43.3 | 47.6 | 49.6 | 48.5 | 46.2 | 48.0 | 42.3 | 34.0 | 18.9 | 154.6 | |
| 6300 | 7.6 | 19.3 | 26.6 | 29.7 | 32.3 | 33.6 | 33.6 | 29.5 | 31.9 | 22.3 | 10.9 | | 153.7 | |
| 8000 | | | 3.2 | 6.2 | 9.7 | 8.9 | 6.3 | 5.9 | | | | | 154.4 | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GASPL 75.5 79.9 82.5 83.8 85.8 88.3 88.9 91.5 93.1 95.7 95.2 92.5 85.8 173.1
 PNL 79.3 85.4 89.0 91.3 94.4 96.5 95.8 97.9 98.6 100.1 98.9 95.5 87.1
 PNL 79.3 85.4 89.0 91.3 94.4 96.5 96.4 97.9 99.1 100.1 98.9 95.5 87.1

DIAMETER RATIO 9.056 FREQUENCY SHIFT -10

TEST DATE 03-16-78 TAPE NO. N300 ALPHA SB59 TAMB 38.48
 LOCATION C41 ANECH CH AERO. RDG. ADH157 PAMB 29.5700 RELHUM 22.60

MODEL TEST POINT 3009 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 0. FREE-JET SPEED M/SEC (O. FPS)

07/19/78 18.288

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X30100
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PM

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

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TEST DATE 03-16-78
LOCATION C41 ANECH CH

TAPE NO. N300
AERO. RDG. ADH155

ALPHA SB59
PAMS 29.5550

TAMB 39.38
RELHUM 22.40

MODEL TEST POINT
6 3010

ACQUSTIC RANGE
12.2 M (40.0 FT) ARC

SIZE
110.1 SQ CM (17.07 SQ IN) - MODEL

FREE-JET SPEED
91.14 M/SEC (299.0 FPS)

07/19/79 15.208

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMDDL X30100

ANGLES MEASURED FROM INLET DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 78.7 | 80.8 | 79.7 | 79.6 | 79.0 | 79.7 | 80.1 | 80.8 | 84.8 | 90.0 | 94.2 | 97.4 | 99.9 | 130.7 |
| 315 | 78.7 | 80.7 | 79.7 | 80.6 | 80.2 | 81.5 | 80.6 | 82.0 | 87.4 | 95.3 | 98.7 | 100.4 | 97.5 | 133.9 |
| 400 | 79.8 | 81.4 | 81.5 | 80.7 | 81.1 | 82.5 | 82.5 | 83.2 | 88.4 | 95.8 | 99.3 | 99.6 | 93.6 | 133.8 |
| 500 | 81.7 | 82.5 | 82.0 | 82.1 | 84.2 | 83.4 | 83.0 | 84.2 | 90.7 | 97.3 | 100.0 | 98.2 | 90.5 | 134.2 |
| 630 | 82.5 | 82.9 | 85.6 | 84.3 | 93.3 | 84.3 | 84.8 | 86.5 | 92.4 | 98.6 | 100.3 | 96.8 | 89.7 | 135.1 |
| 800 | 84.9 | 85.7 | 86.0 | 85.3 | 84.7 | 85.7 | 86.2 | 88.0 | 94.6 | 99.6 | 100.1 | 95.3 | 88.6 | 135.2 |
| 1000 | 85.5 | 84.4 | 85.6 | 86.0 | 85.9 | 87.1 | 87.8 | 89.2 | 95.1 | 99.8 | 100.6 | 94.5 | 89.6 | 135.5 |
| 1250 | 86.8 | 85.5 | 87.3 | 88.2 | 87.9 | 88.3 | 88.6 | 91.2 | 96.7 | 100.4 | 100.8 | 94.0 | 90.0 | 136.3 |
| 1600 | 86.4 | 87.1 | 88.2 | 87.9 | 88.4 | 89.6 | 90.1 | 92.0 | 97.2 | 100.7 | 99.9 | 93.6 | 91.3 | 136.4 |
| 2000 | 88.3 | 86.8 | 87.6 | 87.6 | 87.6 | 89.1 | 90.1 | 93.3 | 97.4 | 101.7 | 99.8 | 94.0 | 91.2 | 136.8 |
| 2500 | 88.2 | 87.7 | 88.3 | 89.4 | 89.4 | 90.3 | 91.5 | 93.9 | 98.3 | 100.8 | 100.0 | 95.2 | 91.4 | 137.1 |
| 3150 | 88.9 | 88.9 | 89.6 | 90.4 | 89.7 | 91.8 | 92.6 | 94.7 | 98.5 | 100.9 | 99.5 | 95.5 | 91.7 | 137.4 |
| 4000 | 90.4 | 90.0 | 89.7 | 90.2 | 90.6 | 91.7 | 92.8 | 95.4 | 98.2 | 101.3 | 100.7 | 95.9 | 93.1 | 137.9 |
| 5000 | 90.2 | 89.4 | 90.2 | 90.8 | 91.2 | 93.5 | 94.0 | 95.7 | 98.9 | 102.2 | 101.3 | 97.4 | 95.0 | 138.9 |
| 6300 | 89.8 | 89.8 | 90.4 | 91.7 | 92.2 | 94.4 | 94.8 | 96.5 | 99.6 | 101.5 | 101.8 | 97.9 | 96.2 | 139.5 |
| 8000 | 90.4 | 90.9 | 91.4 | 91.6 | 92.5 | 94.5 | 94.8 | 96.3 | 98.6 | 101.6 | 101.8 | 99.8 | 97.5 | 140.0 |
| 10000 | 90.6 | 90.4 | 90.3 | 91.6 | 93.6 | 95.1 | 94.8 | 96.6 | 97.2 | 100.4 | 100.7 | 99.5 | 98.6 | 140.0 |
| 12500 | 90.7 | 90.8 | 91.0 | 91.6 | 92.3 | 94.1 | 93.4 | 94.8 | 96.8 | 100.3 | 99.8 | 98.6 | 95.1 | 140.4 |
| 16000 | 89.0 | 90.3 | 89.8 | 92.3 | 92.9 | 94.4 | 92.8 | 94.4 | 95.8 | 97.7 | 97.6 | 97.6 | 97.8 | 140.4 |
| 20000 | 88.6 | 90.7 | 90.9 | 90.6 | 92.3 | 93.1 | 90.2 | 91.9 | 94.6 | 94.6 | 94.2 | 94.6 | 96.1 | 140.3 |
| 25000 | 82.3 | 87.2 | 87.3 | 85.9 | 90.4 | 90.3 | 87.9 | 88.1 | 91.5 | 93.1 | 91.3 | 90.6 | 92.0 | 139.7 |
| 31500 | 80.5 | 82.2 | 83.4 | 84.3 | 84.7 | 84.9 | 83.9 | 84.7 | 88.1 | 88.6 | 87.8 | 85.0 | 89.3 | 138.7 |
| 40000 | 76.5 | 76.3 | 79.3 | 80.7 | 82.9 | 82.8 | 79.4 | 80.1 | 83.1 | 81.8 | 82.0 | 80.9 | 83.4 | 138.3 |
| 50000 | 72.3 | 72.5 | 75.3 | 74.0 | 75.2 | 75.4 | 74.1 | 74.0 | 79.3 | 75.4 | 75.5 | 75.9 | 79.3 | 136.9 |
| 63000 | 64.5 | 64.9 | 66.5 | 66.3 | 66.3 | 66.9 | 68.5 | 67.3 | 72.8 | 69.4 | 70.5 | 68.5 | 71.2 | 135.2 |
| 80000 | 55.7 | 55.5 | 57.5 | 57.5 | 59.9 | 60.8 | 60.0 | 60.0 | 63.0 | 59.5 | 60.7 | 58.7 | 61.4 | 133.7 |
| GASPL | 101.0 | 101.3 | 101.7 | 102.3 | 103.5 | 104.5 | 104.4 | 106.2 | 109.5 | 112.9 | 113.0 | 110.5 | 108.1 | 151.8 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | 299.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | TAPE NO. | ALPHA | TAMB |
|--------------|------------|---------|--------|
| 03-16-78 | N300 | SB59 | 39.38 |
| LOCATION | AERO. RDG. | PAMB | RELHUM |
| C41 ANECH CH | ADH155 | 29.5550 | 22.40 |

| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
|-------|------------|-----------------------|------------------------------------|--------------------------|
| G | 3010 | 12.2 M (40.0 FT) ARC | 110.1 SQ CM (17.07 SQ IN) - MODEL | 91.14 M/SEC (299.0 FPS) |

07/19/79 10.286

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X30105

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PNL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 61.4 | 63.8 | 64.3 | 65.1 | 67.7 | 67.0 | 68.4 | 67.3 | 73.0 | 78.6 | 79.7 | 75.7 | 64.6 | 153.3 |
| 63 | 62.2 | 64.1 | 67.9 | 67.3 | 76.7 | 67.9 | 68.0 | 69.5 | 74.7 | 79.8 | 80.0 | 74.3 | 63.0 | 154.3 |
| 80 | 64.5 | 66.9 | 68.3 | 68.3 | 68.1 | 69.2 | 69.6 | 71.0 | 76.8 | 80.7 | 79.8 | 72.7 | 63.6 | 154.3 |
| 100 | 65.0 | 65.5 | 67.8 | 68.9 | 69.3 | 70.6 | 71.2 | 72.1 | 77.3 | 80.9 | 80.2 | 71.8 | 63.5 | 154.7 |
| 125 | 66.3 | 66.5 | 69.4 | 71.0 | 71.1 | 71.8 | 71.8 | 74.0 | 78.8 | 81.4 | 80.3 | 71.2 | 63.6 | 155.4 |
| 160 | 65.7 | 68.0 | 70.2 | 70.6 | 71.5 | 72.9 | 73.3 | 74.7 | 79.2 | 81.6 | 79.1 | 70.5 | 64.6 | 155.5 |
| 200 | 67.3 | 67.5 | 69.5 | 70.4 | 70.6 | 72.3 | 73.1 | 75.8 | 79.2 | 82.3 | 78.8 | 70.6 | 64.0 | 156.0 |
| 250 | 66.9 | 68.1 | 69.9 | 71.8 | 72.2 | 73.2 | 74.3 | 76.3 | 79.9 | 81.2 | 78.7 | 71.4 | 63.6 | 156.2 |
| 315 | 67.2 | 69.0 | 70.9 | 72.5 | 72.3 | 74.5 | 75.2 | 76.8 | 79.9 | 81.0 | 77.8 | 71.1 | 63.1 | 156.5 |
| 400 | 68.3 | 69.8 | 70.7 | 72.0 | 72.9 | 74.2 | 75.1 | 77.3 | 79.2 | 81.0 | 78.5 | 70.9 | 63.6 | 157.1 |
| 500 | 67.6 | 68.8 | 70.9 | 72.4 | 73.3 | 75.7 | 76.1 | 77.3 | 79.6 | 81.6 | 78.7 | 71.8 | 64.5 | 158.1 |
| 630 | 66.8 | 68.9 | 70.8 | 73.1 | 74.1 | 76.5 | 76.7 | 77.2 | 80.0 | 80.6 | 78.3 | 71.8 | 64.8 | 158.6 |
| 800 | 67.0 | 69.8 | 71.8 | 72.9 | 74.3 | 76.5 | 76.8 | 77.5 | 78.9 | 80.5 | 78.5 | 73.1 | 65.0 | 159.1 |
| 1000 | 67.0 | 69.1 | 70.5 | 72.8 | 75.4 | 77.1 | 76.7 | 77.8 | 77.5 | 79.1 | 77.1 | 72.3 | 65.1 | 159.1 |
| 1250 | 66.9 | 69.4 | 71.3 | 73.0 | 74.3 | 76.2 | 75.4 | 76.2 | 77.1 | 79.1 | 75.9 | 71.8 | 64.5 | 159.5 |
| 1600 | 64.8 | 68.9 | 70.2 | 73.8 | 75.1 | 76.8 | 75.0 | 75.9 | 76.2 | 76.3 | 73.4 | 69.0 | 61.3 | 159.5 |
| 2000 | 63.9 | 69.1 | 71.3 | 72.3 | 74.8 | 75.8 | 72.6 | 73.6 | 75.1 | 73.0 | 69.4 | 64.8 | 57.0 | 159.4 |
| 2500 | 56.3 | 64.9 | 67.5 | 68.5 | 72.9 | 73.0 | 70.4 | 69.7 | 71.6 | 70.8 | 65.4 | 58.6 | 48.6 | 158.8 |
| 3150 | 52.0 | 58.3 | 62.4 | 65.2 | 66.6 | 67.1 | 65.8 | 65.5 | 67.1 | 64.7 | 59.3 | 49.8 | 38.3 | 157.9 |
| 4000 | 42.6 | 48.5 | 55.3 | 59.1 | 62.7 | 63.0 | 59.2 | 58.8 | 59.2 | 54.0 | 48.1 | 36.6 | 18.7 | 157.4 |
| 5000 | 29.0 | 37.5 | 45.6 | 47.5 | 50.3 | 51.1 | 49.3 | 47.4 | 49.5 | 40.5 | 32.2 | 18.3 | | 156.1 |
| 6300 | 4.4 | 16.7 | 25.6 | 29.9 | 32.3 | 33.7 | 34.5 | 30.9 | 31.9 | 21.1 | 10.4 | | | 154.4 |
| 8000 | | | | 7.3 | 9.3 | 11.3 | 9.4 | 5.8 | 2.2 | | | | | 152.8 |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| OASPL | 78.5 | 80.6 | 82.5 | 84.1 | 85.8 | 86.9 | 86.6 | 88.0 | 90.6 | 92.7 | 90.8 | 84.3 | 76.1 | 170.8 |
| PNL | 85.3 | 89.3 | 91.6 | 93.1 | 95.2 | 96.3 | 94.8 | 95.8 | 97.7 | 98.2 | 95.5 | 89.3 | 81.1 | |
| PNLT | 86.6 | 90.4 | 92.7 | 93.1 | 95.2 | 96.3 | 95.4 | 95.8 | 98.4 | 98.2 | 95.5 | 89.3 | 82.1 | |

DIAMETER RATIO 9.056 FREQUENCY SHIFT -10

TEST DATE 03-16-78 TAPE NO. N300 1ALPHA SB59 TAMB 39.38
 LOCATION C41 ANECH CH AERO. RDG. ADH155 PAB 29.5550 RELHUM 22.40

MODEL TEST POINT 3010 ACOUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 91.14 M/SEC (299.0 FPS) FREE-JET SPEED

07/19/79 18.286

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 76 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X30110
 BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 72.4 | 73.9 | 74.0 | 75.6 | 76.2 | 77.4 | 79.5 | 82.0 | 83.8 | 90.5 | 95.2 | 98.2 | 98.4 | 131.2 |
| 315 | 73.7 | 75.3 | 75.6 | 76.0 | 77.1 | 79.9 | 79.8 | 81.9 | 85.7 | 92.3 | 96.3 | 98.5 | 95.2 | 131.8 |
| 400 | 74.6 | 76.5 | 76.1 | 76.7 | 78.5 | 80.5 | 81.3 | 83.1 | 86.8 | 95.7 | 98.6 | 99.1 | 92.5 | 133.2 |
| 500 | 75.4 | 76.4 | 79.5 | 76.0 | 82.4 | 82.0 | 82.7 | 84.7 | 88.1 | 97.0 | 99.5 | 97.7 | 89.0 | 133.5 |
| 630 | 75.6 | 78.0 | 79.2 | 79.5 | 82.2 | 82.7 | 83.6 | 87.2 | 90.7 | 97.9 | 100.3 | 95.5 | 85.9 | 134.4 |
| 800 | 78.3 | 78.1 | 79.8 | 80.9 | 82.0 | 84.1 | 85.3 | 88.3 | 93.1 | 98.7 | 100.9 | 93.0 | 85.1 | 134.6 |
| 1000 | 78.6 | 78.9 | 81.6 | 81.9 | 83.0 | 85.3 | 86.8 | 89.7 | 94.7 | 99.6 | 99.5 | 90.6 | 83.5 | 134.6 |
| 1250 | 79.2 | 81.5 | 83.0 | 83.3 | 84.4 | 87.0 | 87.7 | 90.9 | 95.1 | 99.8 | 99.6 | 90.0 | 83.1 | 134.9 |
| 1600 | 81.6 | 80.2 | 83.5 | 84.6 | 87.5 | 89.1 | 92.3 | 96.3 | 100.0 | 99.2 | 90.1 | 83.6 | 135.2 | |
| 2000 | 80.9 | 81.6 | 83.4 | 83.9 | 84.7 | 87.9 | 89.5 | 93.0 | 97.5 | 100.6 | 98.0 | 89.7 | 83.7 | 135.6 |
| 2500 | 82.3 | 83.4 | 84.4 | 84.9 | 86.2 | 88.3 | 90.7 | 94.2 | 97.7 | 101.1 | 97.5 | 89.9 | 83.1 | 136.0 |
| 3150 | 83.4 | 84.0 | 84.5 | 85.9 | 87.0 | 89.9 | 91.5 | 95.5 | 98.7 | 99.9 | 97.0 | 90.2 | 82.7 | 136.1 |
| 4000 | 83.5 | 83.8 | 85.6 | 85.8 | 86.8 | 89.7 | 91.9 | 95.3 | 97.9 | 99.3 | 96.9 | 90.3 | 82.8 | 136.8 |
| 5000 | 83.6 | 84.5 | 85.5 | 86.4 | 87.8 | 91.1 | 92.8 | 95.7 | 97.5 | 100.2 | 98.0 | 91.4 | 84.4 | 136.6 |
| 6300 | 82.9 | 84.5 | 86.3 | 87.0 | 88.5 | 92.1 | 93.0 | 95.7 | 97.9 | 100.7 | 98.5 | 92.2 | 88.7 | 137.2 |
| 8000 | 83.5 | 84.7 | 85.5 | 86.9 | 88.7 | 92.1 | 92.9 | 95.2 | 97.5 | 99.3 | 97.9 | 93.5 | 87.0 | 137.0 |
| 10000 | 83.6 | 85.8 | 86.7 | 87.0 | 89.1 | 92.0 | 92.9 | 95.5 | 96.7 | 99.4 | 97.5 | 93.5 | 87.7 | 137.5 |
| 12500 | 83.2 | 85.1 | 85.8 | 86.6 | 88.4 | 91.3 | 91.5 | 94.1 | 95.1 | 97.3 | 96.2 | 92.8 | 87.5 | 136.9 |
| 16000 | 82.5 | 85.0 | 86.0 | 86.6 | 88.5 | 90.5 | 90.2 | 92.9 | 93.9 | 96.3 | 94.9 | 91.9 | 87.6 | 137.3 |
| 20000 | 77.9 | 83.0 | 84.1 | 85.2 | 88.4 | 89.8 | 88.2 | 90.0 | 92.0 | 92.9 | 91.8 | 90.1 | 85.8 | 136.8 |
| 25000 | 76.2 | 78.1 | 80.9 | 81.7 | 86.1 | 87.4 | 85.5 | 85.8 | 89.5 | 88.2 | 87.3 | 85.7 | 83.5 | 135.7 |
| 31500 | 74.8 | 75.4 | 78.6 | 80.7 | 80.5 | 82.1 | 82.0 | 82.7 | 86.2 | 87.0 | 84.8 | 81.0 | 78.3 | 135.7 |
| 40000 | 70.3 | 70.1 | 73.6 | 75.3 | 78.8 | 80.2 | 76.6 | 77.8 | 80.8 | 80.7 | 79.0 | 75.5 | 74.0 | 134.9 |
| 50000 | 62.9 | 63.2 | 65.9 | 68.6 | 70.8 | 72.3 | 72.3 | 71.5 | 75.7 | 73.5 | 72.5 | 70.0 | 67.9 | 132.8 |
| 63000 | 56.8 | 57.0 | 59.1 | 62.0 | 62.4 | 64.3 | 65.5 | 64.7 | 70.3 | 66.0 | 65.2 | 63.3 | 61.6 | 131.4 |
| 80000 | 51.3 | 50.4 | 53.9 | 56.8 | 55.5 | 57.4 | 57.5 | 57.9 | 63.1 | 59.1 | 59.3 | 55.2 | 53.4 | 131.3 |
| CASPL | 94.3 | 95.6 | 96.9 | 97.6 | 100.1 | 102.0 | 102.9 | 105.8 | 108.5 | 111.7 | 111.1 | 107.2 | 102.1 | 149.4 |

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TEST DATE 03-16-78 TAPE NO. N3C2 ALPHA SB59 TAMB 38.84
 LOCATION C41 ANECH CH AERO. RDG. ADH156 PAMB 29.5700 RELHUM 21.90

MODEL TEST POINT 3011 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 110.1 SQ CM (17.07 SQ IN) - MODEL 118.26 M/SEC (388.0 FPS) FREE-JET SPEED

07/19/79 18.286

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X30110

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | 79.0 | 79.5 | 78.3 | 78.5 | 77.6 | 77.4 | 77.6 | 78.5 | 82.9 | 88.6 | 92.1 | 94.7 | 93.1 | 128.4 |
| 63 | 79.0 | 79.5 | 78.2 | 78.5 | 78.5 | 80.1 | 78.5 | 78.5 | 84.9 | 93.3 | 96.1 | 97.6 | 93.7 | 131.4 |
| 80 | 80.8 | 81.3 | 80.2 | 79.2 | 80.3 | 80.8 | 80.5 | 81.3 | 85.8 | 94.2 | 96.7 | 96.5 | 91.5 | 131.4 |
| 100 | 81.6 | 82.4 | 80.7 | 79.9 | 84.2 | 82.3 | 81.6 | 82.5 | 88.4 | 95.1 | 97.7 | 94.9 | 91.0 | 132.0 |
| 125 | 82.8 | 82.6 | 84.3 | 81.3 | 94.7 | 83.1 | 82.6 | 84.9 | 91.1 | 96.3 | 98.7 | 93.4 | 91.5 | 133.7 |
| 160 | 85.7 | 86.4 | 85.7 | 84.0 | 84.0 | 84.6 | 84.3 | 86.0 | 93.1 | 97.6 | 97.9 | 92.0 | 91.9 | 133.4 |
| 200 | 85.8 | 84.3 | 85.0 | 84.3 | 85.0 | 85.9 | 85.9 | 87.5 | 93.7 | 97.9 | 98.1 | 91.4 | 91.3 | 133.6 |
| 250 | 87.0 | 85.1 | 85.5 | 85.4 | 86.6 | 87.8 | 87.0 | 88.8 | 95.1 | 98.3 | 97.9 | 91.8 | 92.0 | 134.2 |
| 315 | 86.6 | 87.3 | 87.2 | 86.9 | 87.2 | 88.5 | 88.6 | 90.5 | 96.5 | 99.3 | 97.1 | 91.7 | 92.5 | 135.0 |
| 400 | 89.0 | 86.0 | 87.2 | 87.2 | 87.2 | 89.1 | 89.3 | 91.4 | 97.1 | 100.1 | 96.9 | 92.3 | 92.4 | 135.5 |
| 500 | 88.3 | 88.0 | 87.2 | 87.2 | 87.2 | 89.8 | 89.8 | 92.9 | 98.7 | 99.5 | 97.0 | 93.2 | 92.5 | 136.0 |
| 630 | 89.7 | 89.8 | 89.1 | 89.1 | 89.1 | 91.8 | 92.1 | 94.7 | 98.4 | 99.5 | 97.5 | 93.8 | 93.0 | 136.6 |
| 800 | 90.7 | 90.4 | 90.4 | 90.4 | 90.4 | 92.1 | 93.0 | 95.1 | 98.3 | 100.5 | 98.7 | 95.0 | 94.8 | 137.4 |
| 1000 | 90.8 | 90.8 | 90.3 | 90.3 | 90.3 | 94.1 | 94.2 | 95.8 | 98.8 | 101.2 | 99.4 | 95.3 | 96.8 | 138.4 |
| 1250 | 93.5 | 93.2 | 92.8 | 92.8 | 93.0 | 95.1 | 94.5 | 95.9 | 99.2 | 100.8 | 100.0 | 99.0 | 99.7 | 139.4 |
| 1600 | 92.6 | 93.1 | 93.5 | 92.7 | 93.2 | 95.1 | 94.8 | 95.9 | 98.9 | 101.3 | 100.1 | 99.5 | 100.7 | 140.1 |
| 2000 | 93.1 | 93.0 | 92.5 | 92.4 | 93.6 | 95.0 | 95.0 | 96.3 | 98.3 | 100.3 | 99.8 | 99.5 | 101.1 | 140.4 |
| 2500 | 92.9 | 93.9 | 93.4 | 92.3 | 92.9 | 94.3 | 93.8 | 95.5 | 97.7 | 99.6 | 98.4 | 98.3 | 100.7 | 140.5 |
| 3150 | 92.0 | 92.7 | 92.0 | 91.3 | 92.5 | 93.5 | 92.7 | 94.5 | 94.7 | 95.0 | 94.2 | 95.3 | 97.8 | 139.5 |
| 4000 | 88.1 | 90.0 | 90.2 | 89.8 | 93.0 | 92.8 | 89.8 | 90.3 | 92.5 | 90.7 | 90.1 | 91.5 | 96.1 | 138.9 |
| 5000 | 85.7 | 89.6 | 89.3 | 88.9 | 90.6 | 90.4 | 87.0 | 85.8 | 91.9 | 92.3 | 90.2 | 89.3 | 93.2 | 139.8 |
| 6300 | 83.2 | 83.9 | 85.3 | 84.6 | 84.5 | 85.1 | 84.4 | 84.5 | 85.4 | 84.9 | 83.4 | 82.9 | 88.1 | 137.8 |
| 8000 | 78.2 | 78.2 | 80.5 | 81.7 | 83.3 | 83.2 | 78.0 | 77.9 | 80.7 | 78.0 | 77.4 | 77.8 | 82.4 | 137.6 |
| 10000 | 76.0 | 74.7 | 76.8 | 77.0 | 75.4 | 75.3 | 73.7 | 71.6 | 76.2 | 71.3 | 71.0 | 72.2 | 77.0 | 136.4 |
| 12500 | 67.7 | 66.8 | 68.2 | 69.4 | 66.3 | 67.3 | 67.0 | 64.7 | 71.8 | 67.2 | 67.5 | 66.2 | 71.0 | 134.9 |
| 16000 | 57.4 | 56.9 | 58.2 | 60.2 | 59.5 | 60.4 | 59.4 | 59.0 | 62.0 | 57.4 | 57.7 | 56.4 | 61.2 | 132.9 |
| 20000 | 102.6 | 102.8 | 102.8 | 102.1 | 103.8 | 104.5 | 104.1 | 105.7 | 109.3 | 111.6 | 110.8 | 108.8 | 109.4 | 151.2 |

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 388.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-16-78 TAPE NO. N300 ALPHA SB59 TANB 38.84
LOCATION C41 ANECX CH AERG. RDG. ADH156 PAMB 29.5700 RELHUM 21.90

MODEL TEST POINT 6 3011 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 110.1 SQ CM (17.07 SQ IN) - MODEL 118.26 M/SEC (388.0 FPS) FREE-JET SPEED

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X30115

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 50 | 61.3 | 63.7 | 63.0 | 62.9 | 67.6 | 65.9 | 65.0 | 65.5 | 70.7 | 76.4 | 77.4 | 72.4 | 65.2 | 151.1 |
| 63 | 62.5 | 63.9 | 66.6 | 64.3 | 78.1 | 66.7 | 66.0 | 67.9 | 73.4 | 77.5 | 78.4 | 70.9 | 65.6 | 152.6 |
| 80 | 65.4 | 67.5 | 68.0 | 67.0 | 67.4 | 68.1 | 67.7 | 69.0 | 73.4 | 78.8 | 77.5 | 69.4 | 65.9 | 152.5 |
| 100 | 65.3 | 65.4 | 66.9 | 67.3 | 68.4 | 69.4 | 69.2 | 71.4 | 75.9 | 79.0 | 77.6 | 68.7 | 65.2 | 152.8 |
| 125 | 66.4 | 66.1 | 68.7 | 68.3 | 69.9 | 71.2 | 70.2 | 71.7 | 77.2 | 79.3 | 77.3 | 68.9 | 65.7 | 153.4 |
| 160 | 65.9 | 68.6 | 70.0 | 69.6 | 70.4 | 71.7 | 71.8 | 73.2 | 78.5 | 80.1 | 76.3 | 68.6 | 65.8 | 154.1 |
| 200 | 68.1 | 67.2 | 69.1 | 69.8 | 70.3 | 72.2 | 72.3 | 74.0 | 78.9 | 80.8 | 75.9 | 68.9 | 65.2 | 154.6 |
| 250 | 67.0 | 68.4 | 70.2 | 70.1 | 71.8 | 73.8 | 73.6 | 75.3 | 80.3 | 79.9 | 75.7 | 69.4 | 64.7 | 155.2 |
| 315 | 68.0 | 69.8 | 70.9 | 71.0 | 72.7 | 74.5 | 74.7 | 76.8 | 79.7 | 79.6 | 75.8 | 69.4 | 64.4 | 155.8 |
| 400 | 68.6 | 70.1 | 70.8 | 72.0 | 72.7 | 74.6 | 75.3 | 77.0 | 79.3 | 80.2 | 76.5 | 70.0 | 65.2 | 156.6 |
| 500 | 68.2 | 69.7 | 71.8 | 71.8 | 74.4 | 76.4 | 76.3 | 77.4 | 79.6 | 80.6 | 76.8 | 70.7 | 66.3 | 157.6 |
| 630 | 70.5 | 72.3 | 73.3 | 73.7 | 74.9 | 77.2 | 76.4 | 77.3 | 79.7 | 79.9 | 77.0 | 72.8 | 68.2 | 158.6 |
| 800 | 69.3 | 71.9 | 73.8 | 73.9 | 75.0 | 77.0 | 76.6 | 77.1 | 79.2 | 80.2 | 76.8 | 72.8 | 68.3 | 159.2 |
| 1000 | 69.5 | 71.8 | 72.8 | 73.6 | 75.5 | 77.0 | 76.8 | 77.6 | 79.6 | 79.0 | 76.2 | 72.3 | 67.7 | 159.5 |
| 1250 | 69.1 | 72.5 | 73.7 | 73.6 | 74.8 | 76.4 | 75.8 | 76.9 | 78.0 | 78.3 | 74.6 | 70.6 | 66.1 | 159.6 |
| 1600 | 67.8 | 71.3 | 72.4 | 72.9 | 74.7 | 75.9 | 74.9 | 76.1 | 75.1 | 73.6 | 70.0 | 66.7 | 61.3 | 158.7 |
| 2000 | 63.4 | 68.4 | 70.6 | 71.6 | 75.4 | 75.5 | 72.2 | 72.0 | 72.9 | 69.1 | 65.3 | 61.7 | 57.0 | 158.1 |
| 2500 | 59.8 | 67.4 | 69.4 | 70.5 | 73.1 | 73.2 | 69.5 | 67.5 | 72.1 | 70.0 | 64.3 | 57.3 | 49.9 | 159.0 |
| 3150 | 54.7 | 60.0 | 64.4 | 65.5 | 66.4 | 67.3 | 66.3 | 65.4 | 64.5 | 61.0 | 54.9 | 46.7 | 37.1 | 157.0 |
| 4000 | 44.3 | 50.4 | 56.6 | 60.2 | 63.1 | 63.4 | 57.8 | 56.4 | 56.8 | 50.2 | 43.5 | 33.5 | 17.8 | 156.7 |
| 5000 | 32.7 | 39.7 | 47.0 | 50.4 | 50.5 | 51.0 | 48.9 | 45.0 | 46.5 | 35.6 | 27.7 | 14.6 | 155.6 | |
| 6300 | 7.5 | 18.6 | 27.3 | 33.0 | 32.4 | 34.1 | 33.0 | 28.3 | 30.9 | 19.0 | 7.4 | 154.0 | 152.0 | |
| 8000 | | | | 6.0 | 8.9 | 10.9 | 8.8 | 4.8 | 1.2 | | | | | |

ORIGINAL PAGE 1
OF POOR QUALITY

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| GASPL | 79.8 | 82.0 | 83.5 | 83.8 | 86.2 | 86.9 | 88.3 | 87.4 | 90.3 | 91.3 | 88.6 | 82.6 | 78.0 | 170.2 |
| PNL | 87.0 | 92.3 | 92.3 | 93.1 | 95.5 | 96.1 | 94.5 | 95.3 | 97.0 | 96.6 | 93.1 | 87.5 | 82.6 | |
| PNLT | 88.5 | 91.4 | 93.4 | 93.7 | 96.5 | 96.1 | 94.5 | 95.3 | 97.8 | 96.3 | 93.1 | 87.5 | 82.6 | |

DIAMETER RATIO 9.056 FREQUENCY SHIFT -10

| | | | | | | | |
|-----------|--------------|------------|--------|--------|---------|--------|-------|
| TEST DATE | 03-16-78 | TAPE NO. | N300 | IALPHA | SB59 | TAMB | 38.84 |
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH156 | PAMB | 29.5700 | RELHUM | 21.90 |

| | | | | | |
|-------|------------|------------------------|------------------------------|------|--------------------------|
| MODEL | TEST POINT | ACUSTIC RANGE | 9032.2 SQ CM (1400.00 SQ IN) | SIZE | FREE-JET SPEED |
| 6 | 3011 | 731.5 M (2400.0 FT) SL | | FULL | 110.26 M/SEC (388.0 FPS) |

07/19/79 18.286

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X 120
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250 79.3 85.1 83.6 84.4 85.0 87.6 89.7 91.6 93.6 99.9 104.3 107.2 107.4 140.7

315 81.1 83.2 84.2 85.5 87.1 89.4 90.1 92.7 95.9 102.0 106.4 109.3 106.2 142.5

400 82.9 85.7 86.0 86.0 87.3 89.7 91.3 92.8 97.2 106.3 109.2 110.6 108.8 144.5

500 84.0 86.0 87.3 89.3 90.8 92.2 94.1 98.0 107.4 110.5 111.2 109.1 145.4

630 84.8 87.6 89.7 88.4 106.8 92.4 93.0 96.4 99.9 107.5 111.1 111.8 109.7 146.7

800 87.9 89.4 90.2 91.6 93.2 94.3 98.0 102.2 108.3 110.9 111.1 109.2 146.0

1000 91.5 91.3 92.3 91.6 92.4 94.5 95.9 98.6 103.1 108.6 110.5 110.2 108.3 145.8

1250 88.6 91.9 92.9 92.7 93.8 96.2 97.0 99.7 103.7 108.8 111.1 111.0 108.5 146.4

1600 90.5 90.6 91.9 92.1 93.5 96.1 97.0 100.4 104.4 109.5 110.9 110.6 108.1 146.4

2000 90.9 92.2 93.0 92.2 93.1 95.4 97.1 100.7 105.2 109.8 111.0 110.2 107.5 146.6

2500 90.4 92.2 92.9 93.2 93.8 95.9 98.3 101.4 105.2 110.8 110.5 109.7 105.9 146.6

3150 91.4 93.3 93.0 93.5 94.3 96.9 98.8 102.0 106.0 109.4 109.8 109.0 105.5 146.1

4000 91.3 92.6 92.7 92.9 93.7 96.6 98.2 101.9 104.7 109.1 108.4 107.3 104.3 145.3

5000 91.2 93.3 92.8 93.0 94.1 97.2 98.3 102.3 104.3 109.0 107.8 106.7 103.4 145.2

6300 90.4 94.1 94.1 93.3 94.6 97.4 98.6 101.8 103.7 107.5 106.8 106.3 104.0 144.7

8000 90.8 95.3 94.6 93.7 94.8 96.9 98.2 100.8 103.6 106.4 105.9 105.3 102.9 144.4

10000 89.5 95.1 95.8 95.6 95.7 97.6 97.5 100.8 101.8 105.0 104.8 105.6 102.3 144.2

12500 88.0 93.7 94.4 95.2 96.2 97.4 96.1 98.9 100.0 103.2 102.1 102.9 100.6 143.3

16000 86.3 92.6 93.9 94.7 95.9 97.4 94.9 98.0 98.8 101.7 100.3 101.0 98.0 143.4

20000 80.5 89.2 90.9 92.3 95.6 96.4 92.8 94.9 96.4 98.1 96.7 98.2 95.2 142.6

25000 78.9 84.5 87.3 88.3 92.4 93.8 90.6 90.9 94.1 93.1 93.1 94.3 93.4 141.6

31500 77.1 80.8 84.7 86.6 87.4 88.2 87.1 87.9 90.5 91.9 90.7 88.9 88.2 141.2

40000 71.9 75.7 79.5 81.4 85.4 86.9 82.2 83.2 85.5 86.9 85.3 83.9 83.4 141.1

50000 64.7 68.3 72.1 75.3 77.4 78.4 76.9 76.4 80.6 80.4 79.7 79.1 78.0 138.9

63000 59.0 62.4 65.5 68.9 69.2 70.4 71.7 70.3 76.2 73.9 73.9 72.2 72.2 138.3

80000 52.5 55.8 59.3 63.7 62.4 64.6 63.9 65.1 70.3 67.8 69.4 66.4 64.8 139.1

GASPL 102.0 104.8 105.4 105.5 109.8 108.8 109.4 112.5 115.6 120.5 121.8 121.9 119.6 158.5

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OF POOR QUALITYTEST DATE 03-16-78
LOCATION C41 ANECH CHTAPE NO. N300
AERO. RDG. ADH142I ALPHA SB59
PAMB 23.5000TAMB 40.28
RELHUM 22.00

MODEL TEST POINT

3012

ACOUSTIC RANGE

12.2 M (40.0 FT) ARC

SIZE

110.1 SQ CM (17.07 SQ IN) - MODEL

FREE-JET SPEED

0. M/SEC (0. FPS)

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X30120

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 79.3 | 85.1 | 83.6 | 84.4 | 85.0 | 87.3 | 89.7 | 91.6 | 93.6 | 99.9 | 104.3 | 107.2 | 107.4 | 140.7 |
| 315 | 81.1 | 83.2 | 84.2 | 85.5 | 87.1 | 89.4 | 90.1 | 92.7 | 95.9 | 102.0 | 106.4 | 109.3 | 108.2 | 142.5 |
| 400 | 82.9 | 85.7 | 86.0 | 86.0 | 87.3 | 89.7 | 91.3 | 92.8 | 97.2 | 106.3 | 109.2 | 110.6 | 108.8 | 144.5 |
| 500 | 84.0 | 86.0 | 87.3 | 87.3 | 89.9 | 90.8 | 92.2 | 94.1 | 98.0 | 107.4 | 110.5 | 111.2 | 109.1 | 145.4 |
| 630 | 84.8 | 87.6 | 89.7 | 88.4 | 106.8 | 92.4 | 93.0 | 96.4 | 99.9 | 107.5 | 111.1 | 111.8 | 109.7 | 146.7 |
| 800 | 87.9 | 87.9 | 89.4 | 90.2 | 91.6 | 93.2 | 94.3 | 98.0 | 102.2 | 108.3 | 110.9 | 111.1 | 109.2 | 146.0 |
| 1000 | 91.5 | 91.3 | 92.3 | 91.6 | 92.4 | 94.5 | 95.9 | 98.6 | 103.1 | 108.6 | 110.5 | 110.2 | 108.3 | 145.8 |
| 1250 | 88.6 | 91.9 | 92.9 | 92.7 | 93.8 | 96.2 | 97.0 | 99.7 | 103.7 | 108.8 | 111.1 | 111.0 | 108.5 | 146.4 |
| 1600 | 90.5 | 90.6 | 91.9 | 92.1 | 93.5 | 96.1 | 97.0 | 100.4 | 104.4 | 109.5 | 110.9 | 110.6 | 108.1 | 146.4 |
| 2000 | 90.9 | 92.2 | 93.0 | 92.2 | 93.1 | 95.4 | 97.1 | 100.7 | 105.2 | 109.8 | 111.0 | 110.2 | 107.5 | 146.5 |
| 2500 | 90.4 | 92.2 | 92.9 | 93.2 | 93.8 | 95.9 | 98.3 | 101.4 | 105.2 | 110.8 | 110.5 | 109.7 | 105.9 | 146.6 |
| 3150 | 91.4 | 93.3 | 93.0 | 93.5 | 94.3 | 96.9 | 98.8 | 102.0 | 106.0 | 109.4 | 109.8 | 109.0 | 105.5 | 146.1 |
| 4000 | 91.3 | 92.6 | 92.7 | 92.9 | 93.7 | 96.6 | 98.2 | 101.9 | 104.7 | 109.1 | 108.4 | 107.3 | 104.3 | 145.3 |
| 5000 | 91.2 | 93.3 | 92.8 | 93.0 | 94.1 | 97.2 | 98.3 | 102.3 | 104.3 | 109.0 | 107.8 | 106.7 | 103.4 | 145.2 |
| 6300 | 90.4 | 94.1 | 94.1 | 93.3 | 94.6 | 97.4 | 98.6 | 101.8 | 103.7 | 107.5 | 106.8 | 106.3 | 104.0 | 144.7 |
| 8000 | 90.8 | 95.3 | 94.6 | 93.7 | 94.8 | 96.9 | 98.2 | 100.8 | 103.6 | 106.4 | 105.9 | 105.3 | 102.9 | 144.4 |
| 10000 | 89.5 | 95.1 | 95.8 | 95.6 | 95.7 | 97.6 | 97.5 | 100.8 | 101.8 | 105.0 | 104.8 | 105.6 | 102.3 | 144.2 |
| 12500 | 88.0 | 93.7 | 94.4 | 95.2 | 96.2 | 97.4 | 96.1 | 98.9 | 100.0 | 103.2 | 102.1 | 102.9 | 100.6 | 143.3 |
| 16000 | 86.3 | 92.6 | 93.9 | 94.7 | 95.9 | 97.4 | 94.9 | 98.0 | 98.8 | 101.7 | 100.3 | 101.0 | 98.0 | 143.4 |
| 20000 | 80.5 | 89.2 | 90.9 | 92.3 | 95.6 | 96.4 | 92.8 | 94.9 | 96.4 | 98.1 | 96.7 | 98.2 | 95.2 | 142.6 |
| 25000 | 78.9 | 84.5 | 87.3 | 88.3 | 92.4 | 93.8 | 90.6 | 90.9 | 94.1 | 93.1 | 93.1 | 94.3 | 93.4 | 141.6 |
| 31500 | 77.1 | 80.8 | 84.7 | 86.6 | 87.4 | 88.2 | 87.1 | 87.9 | 90.5 | 91.9 | 90.7 | 88.9 | 88.2 | 141.2 |
| 40000 | 71.9 | 75.7 | 79.5 | 81.4 | 85.4 | 86.9 | 82.2 | 83.2 | 85.5 | 86.9 | 85.3 | 83.9 | 84.4 | 141.1 |
| 50000 | 64.7 | 68.3 | 72.1 | 75.3 | 77.4 | 78.4 | 76.9 | 76.4 | 80.6 | 80.4 | 79.7 | 79.1 | 78.0 | 138.9 |
| 63000 | 59.0 | 62.4 | 65.5 | 68.9 | 69.2 | 70.4 | 71.7 | 70.3 | 76.2 | 73.9 | 73.9 | 73.9 | 72.2 | 138.3 |
| 80000 | 52.5 | 55.8 | 59.3 | 63.7 | 62.4 | 64.6 | 63.9 | 65.1 | 70.3 | 67.8 | 69.4 | 66.4 | 64.8 | 139.1 |
| GASPL | 102.0 | 104.8 | 105.4 | 105.5 | 109.8 | 108.8 | 109.4 | 112.5 | 115.6 | 120.5 | 121.8 | 121.9 | 119.6 | 158.5 |

| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | TURBULANCE CORRECTION - YES |
| | 48.00 | |

| TEST DATE | 03-16-78 | TAPE NO. | N300 | I ALPHA | SB59 | TAMB | 40.28 |
|-----------|--------------|------------|--------|---------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERG. RDG. | ADH142 | PAMB | 29.5000 | RELHUM | 22.00 |

| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
|-------|------------|-----------------------|----------------------------|----------------------------|
| 6 | 3012 | 12.2 M (40.0 FT) ARC | 110.1 SQ CM (17.07 SQ IN) | - MODEL 0. M/SEC (0. FPS) |

07/19/79 18.286

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X30125

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 63.7 | 67.3 | 69.6 | 70.4 | 78.4 | 74.4 | 75.6 | 77.1 | 80.4 | 88.6 | 90.2 | 88.7 | 83.3 | 164.8 |
| 63 | 64.5 | 68.9 | 71.9 | 71.4 | 90.2 | 75.9 | 76.4 | 79.4 | 82.2 | 88.7 | 90.8 | 89.3 | 83.8 | 165.9 |
| 80 | 67.5 | 69.1 | 71.7 | 73.2 | 75.0 | 76.7 | 77.7 | 81.0 | 84.4 | 89.4 | 90.5 | 88.5 | 83.2 | 165.1 |
| 100 | 71.0 | 72.4 | 74.5 | 74.5 | 75.8 | 78.0 | 79.3 | 81.5 | 85.3 | 89.7 | 90.1 | 87.5 | 82.2 | 164.9 |
| 125 | 68.0 | 72.9 | 75.1 | 75.6 | 77.1 | 79.6 | 80.3 | 82.6 | 85.8 | 89.3 | 90.6 | 88.2 | 82.1 | 165.5 |
| 160 | 69.7 | 71.5 | 73.8 | 74.9 | 76.6 | 79.4 | 80.1 | 83.1 | 86.3 | 90.3 | 90.2 | 87.5 | 81.4 | 165.6 |
| 200 | 69.9 | 72.9 | 74.8 | 74.8 | 76.1 | 78.6 | 80.1 | 83.3 | 87.0 | 90.5 | 90.0 | 86.8 | 80.3 | 165.7 |
| 250 | 69.1 | 72.6 | 74.5 | 75.6 | 76.6 | 78.8 | 81.1 | 83.8 | 86.8 | 91.2 | 89.2 | 85.8 | 78.1 | 165.7 |
| 315 | 69.7 | 73.3 | 74.3 | 75.6 | 76.9 | 79.7 | 81.4 | 84.1 | 87.3 | 89.5 | 88.1 | 84.6 | 76.8 | 165.3 |
| 400 | 69.1 | 72.4 | 73.7 | 74.7 | 76.0 | 79.0 | 80.5 | 83.7 | 85.7 | 88.8 | 86.3 | 82.4 | 74.7 | 164.4 |
| 500 | 68.6 | 72.7 | 73.5 | 74.6 | 76.2 | 79.4 | 80.4 | 83.9 | 85.0 | 88.4 | 85.2 | 81.1 | 72.9 | 164.3 |
| 630 | 67.4 | 73.2 | 74.6 | 74.7 | 76.5 | 79.5 | 80.5 | 83.2 | 84.2 | 86.6 | 83.8 | 80.1 | 72.5 | 163.8 |
| 800 | 67.5 | 74.1 | 74.9 | 75.0 | 76.6 | 78.9 | 80.0 | 82.1 | 83.9 | 85.3 | 82.6 | 78.6 | 70.4 | 163.5 |
| 1000 | 55.9 | 73.8 | 76.1 | 76.9 | 77.5 | 79.6 | 79.3 | 82.1 | 82.1 | 83.7 | 81.2 | 78.4 | 68.8 | 163.4 |
| 1250 | 64.2 | 72.3 | 74.7 | 76.6 | 78.2 | 79.5 | 78.0 | 80.3 | 80.3 | 81.8 | 78.2 | 75.1 | 65.9 | 162.4 |
| 1600 | 62.1 | 71.2 | 74.3 | 76.3 | 78.1 | 79.8 | 77.1 | 79.5 | 79.2 | 80.3 | 76.1 | 72.4 | 61.5 | 162.5 |
| 2000 | 55.8 | 67.6 | 71.4 | 74.0 | 78.0 | 79.1 | 75.3 | 76.6 | 76.8 | 76.4 | 71.9 | 68.4 | 56.1 | 161.7 |
| 2500 | 52.9 | 62.3 | 67.4 | 70.0 | 74.9 | 76.6 | 73.1 | 72.5 | 74.3 | 70.9 | 67.2 | 62.3 | 50.0 | 160.8 |
| 3150 | 48.6 | 56.9 | 63.8 | 67.5 | 69.3 | 70.4 | 69.0 | 68.8 | 69.6 | 68.0 | 62.1 | 52.7 | 37.2 | 160.4 |
| 4000 | 38.0 | 48.0 | 55.5 | 59.3 | 65.2 | 67.0 | 62.0 | 61.7 | 61.5 | 59.1 | 51.4 | 39.6 | 19.7 | 160.2 |
| 5000 | 21.5 | 33.4 | 42.3 | 48.7 | 52.6 | 54.2 | 52.1 | 49.8 | 50.9 | 45.5 | 36.4 | 21.5 | | 158.1 |
| 6300 | | 14.2 | 24.6 | 32.5 | 35.3 | 37.2 | 37.7 | 33.9 | 35.3 | 25.7 | 13.8 | | | 157.4 |
| 8000 | | | | 9.6 | 11.8 | 15.1 | 13.2 | 10.9 | 9.5 | | | | | 158.2 |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|-------|------|-------|-------|-------|-------|------|------|-------|
| CASPL | 80.1 | 84.4 | 85.4 | 87.3 | 92.7 | 91.3 | 91.8 | 94.5 | 96.9 | 100.6 | 100.2 | 97.7 | 91.6 | 177.3 |
| PNL | 84.4 | 91.1 | 94.0 | 95.7 | 99.0 | 100.2 | 98.7 | 100.8 | 102.4 | 104.9 | 103.0 | 99.6 | 92.0 | |
| PNLT | 85.0 | 91.1 | 94.0 | 95.7 | 99.0 | 101.3 | 98.2 | 100.8 | 102.9 | 104.9 | 103.0 | 99.6 | 92.0 | |

DIAMETER RATIO 9.056 FREQUENCY SHIFT -10

TEST DATE 03-16-78 TAPE NO. N300 ALPHA SB59 TAMB 40.28
 LOCATION C41 ANECH CH AERO. RDG. ADH142 PAMB 29.5000 RELHUM 22.00

MODEL TEST POINT 3012 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE FREE-JET SPEED
 - 6 0. M/SEC (0. FPS)

07/19/79 18.286

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X30130
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50
63
80

100
125
150
200

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| | | | | | | | | | | | | | | |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 76.4 | 79.8 | 79.5 | 80.6 | 81.4 | 83.3 | 85.7 | 87.1 | 89.5 | 96.4 | 101.3 | 104.5 | 103.4 | 137.5 |
| 315 | 77.6 | 79.6 | 81.0 | 81.4 | 82.5 | 84.9 | 85.8 | 87.7 | 91.4 | 98.2 | 102.9 | 105.6 | 103.0 | 138.5 |
| 400 | 79.6 | 80.9 | 82.1 | 81.7 | 83.3 | 85.7 | 86.5 | 88.5 | 92.9 | 102.3 | 105.4 | 106.2 | 101.5 | 140.3 |
| 500 | 80.0 | 81.8 | 84.6 | 83.3 | 83.4 | 86.5 | 87.9 | 89.8 | 94.0 | 103.6 | 107.2 | 106.7 | 98.3 | 141.1 |
| 630 | 80.6 | 82.6 | 84.9 | 84.4 | 89.3 | 88.4 | 89.0 | 91.9 | 96.4 | 104.2 | 108.1 | 105.8 | 94.4 | 141.9 |
| 800 | 83.6 | 82.9 | 85.2 | 86.2 | 87.1 | 89.2 | 90.6 | 94.0 | 98.9 | 105.5 | 107.6 | 103.3 | 91.0 | 141.4 |
| 1000 | 85.2 | 84.3 | 87.0 | 86.8 | 88.2 | 90.3 | 91.9 | 95.1 | 100.6 | 106.6 | 107.3 | 100.7 | 89.6 | 141.7 |
| 1250 | 83.9 | 86.2 | 97.7 | 88.5 | 89.3 | 92.2 | 93.0 | 96.5 | 100.7 | 106.8 | 108.1 | 99.8 | 88.9 | 142.2 |
| 1600 | 85.7 | 85.3 | 87.4 | 88.4 | 89.5 | 92.3 | 94.2 | 97.4 | 102.4 | 107.0 | 107.9 | 99.1 | 89.4 | 142.4 |
| 2000 | 85.4 | 86.0 | 88.0 | 88.2 | 89.3 | 92.2 | 94.1 | 97.7 | 103.2 | 107.3 | 106.8 | 98.2 | 90.0 | 142.3 |
| 2500 | 86.4 | 87.2 | 88.4 | 89.4 | 90.3 | 93.1 | 95.3 | 98.2 | 102.7 | 108.3 | 106.5 | 98.7 | 89.9 | 142.7 |
| 3150 | 87.2 | 87.5 | 88.5 | 89.5 | 90.8 | 93.7 | 95.3 | 99.3 | 103.5 | 106.9 | 106.6 | 99.0 | 89.7 | 142.5 |
| 4000 | 86.8 | 87.9 | 88.7 | 89.4 | 90.9 | 93.8 | 95.9 | 99.1 | 102.9 | 105.3 | 105.2 | 98.1 | 89.3 | 141.9 |
| 5000 | 88.9 | 88.3 | 89.3 | 90.0 | 91.1 | 94.2 | 96.8 | 99.5 | 102.1 | 106.7 | 105.1 | 97.2 | 89.2 | 142.1 |
| 6300 | 90.2 | 89.8 | 90.6 | 90.1 | 91.3 | 94.9 | 96.1 | 98.8 | 102.2 | 105.8 | 104.3 | 97.0 | 90.5 | 141.8 |
| 8000 | 91.8 | 92.0 | 92.1 | 91.5 | 92.0 | 94.4 | 95.7 | 98.6 | 102.3 | 104.7 | 103.4 | 97.3 | 89.9 | 141.7 |
| 10000 | 90.7 | 92.4 | 93.5 | 92.6 | 93.2 | 95.4 | 95.2 | 98.6 | 101.3 | 104.5 | 103.3 | 98.1 | 90.7 | 142.1 |
| 12500 | 88.8 | 91.2 | 91.6 | 92.7 | 93.5 | 94.6 | 94.3 | 96.9 | 99.5 | 102.7 | 101.6 | 97.3 | 90.8 | 141.5 |
| 16000 | 87.0 | 90.3 | 91.4 | 92.2 | 93.9 | 94.9 | 93.6 | 96.2 | 97.8 | 101.4 | 99.8 | 96.3 | 90.2 | 141.8 |
| 20000 | 82.0 | 87.4 | 88.7 | 90.3 | 92.5 | 94.1 | 92.0 | 93.6 | 96.4 | 98.5 | 96.9 | 93.4 | 88.2 | 141.3 |
| 25000 | 80.3 | 83.2 | 86.0 | 86.6 | 90.2 | 91.8 | 89.1 | 89.6 | 93.8 | 94.1 | 92.4 | 90.1 | 86.7 | 140.3 |
| 31500 | 78.9 | 79.0 | 83.5 | 85.9 | 85.4 | 86.7 | 85.8 | 87.1 | 91.3 | 92.9 | 90.1 | 85.1 | 81.7 | 140.7 |
| 40000 | 73.9 | 75.0 | 77.9 | 80.1 | 83.9 | 84.6 | 80.9 | 82.4 | 86.2 | 86.9 | 84.6 | 79.6 | 77.1 | 140.0 |
| 50000 | 66.5 | 68.1 | 70.6 | 73.5 | 75.9 | 77.7 | 76.4 | 75.8 | 81.4 | 79.9 | 77.9 | 74.6 | 71.8 | 138.1 |
| 63000 | 61.2 | 61.4 | 63.8 | 66.4 | 67.2 | 68.9 | 70.9 | 69.3 | 75.7 | 72.4 | 71.9 | 68.4 | 65.9 | 136.7 |
| 80000 | 54.7 | 54.5 | 57.8 | 61.5 | 59.9 | 62.6 | 62.3 | 63.3 | 69.2 | 66.3 | 65.7 | 59.3 | 57.3 | 137.0 |
| 6ASPL | 99.8 | 100.8 | 102.0 | 102.4 | 105.0 | 105.9 | 106.7 | 109.7 | 113.6 | 118.2 | 118.6 | 114.9 | 109.1 | 155.3 |

TEST DATE 03-16-78 TAPE NO. N300 ALPHA SB59 TAMB 40.28
LOCATION C41 ANECH CH AERO. RDG. ADH146 PAMB 29.5250 RELHUM 21.80

MODEL TEST POINT 3013 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 110.1 SQ CM (17.07 SQ IN) - MODEL 90.83 M/SEC (298.0 FPS) FREE-JET SPEED

07/19/79 16.286

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X30130

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | | | | | | | | | | | | | | |
| 315 | 82.1 | 84.3 | 83.0 | 82.9 | 82.6 | 83.3 | 84.2 | 84.3 | 88.6 | 94.9 | 99.1 | 102.1 | 100.9 | 135.4 |
| 400 | 82.1 | 84.3 | 83.0 | 83.9 | 83.8 | 85.0 | 84.9 | 85.7 | 91.5 | 100.4 | 103.4 | 105.5 | 102.1 | 135.6 |
| 500 | 83.1 | 84.2 | 84.7 | 84.2 | 84.6 | 85.8 | 85.9 | 87.1 | 92.3 | 101.5 | 105.2 | 105.8 | 100.2 | 139.6 |
| 630 | 85.2 | 85.6 | 85.7 | 85.8 | 89.8 | 86.7 | 87.1 | 88.1 | 94.6 | 102.1 | 106.1 | 105.3 | 97.6 | 140.0 |
| 800 | 85.6 | 86.4 | 88.3 | 87.8 | 101.1 | 88.6 | 88.2 | 90.1 | 97.3 | 103.5 | 106.8 | 103.4 | 95.6 | 140.7 |
| 1000 | 88.2 | 86.9 | 89.8 | 86.8 | 88.5 | 89.5 | 89.7 | 92.1 | 99.1 | 104.8 | 106.6 | 101.3 | 95.4 | 140.3 |
| 1250 | 89.2 | 87.6 | 88.9 | 89.5 | 89.7 | 90.6 | 91.1 | 93.2 | 99.3 | 105.1 | 106.6 | 100.5 | 94.9 | 140.8 |
| 1600 | 90.8 | 89.0 | 90.8 | 91.1 | 90.9 | 92.6 | 92.3 | 94.7 | 101.2 | 105.4 | 106.6 | 100.0 | 95.5 | 141.3 |
| 2000 | 89.4 | 90.9 | 91.4 | 91.1 | 91.1 | 92.9 | 93.6 | 95.7 | 102.2 | 106.0 | 105.6 | 99.3 | 96.3 | 141.4 |
| 2500 | 91.3 | 90.1 | 91.1 | 91.1 | 92.9 | 93.6 | 93.6 | 96.3 | 101.9 | 107.2 | 105.6 | 100.0 | 96.5 | 141.9 |
| 3150 | 91.0 | 91.7 | 91.8 | 92.4 | 92.2 | 94.0 | 95.0 | 96.9 | 103.0 | 106.1 | 106.0 | 100.7 | 96.6 | 142.0 |
| 4000 | 91.9 | 91.9 | 92.3 | 92.6 | 92.9 | 94.8 | 95.3 | 98.5 | 102.8 | 105.9 | 105.0 | 100.2 | 96.7 | 141.9 |
| 5000 | 92.7 | 92.3 | 92.5 | 92.7 | 93.3 | 95.2 | 96.3 | 98.4 | 102.4 | 106.8 | 105.4 | 99.9 | 97.1 | 142.4 |
| 6300 | 92.2 | 92.7 | 92.7 | 93.5 | 93.7 | 96.0 | 97.3 | 99.2 | 103.2 | 106.6 | 105.3 | 100.4 | 99.0 | 142.7 |
| 8000 | 94.3 | 93.1 | 93.4 | 93.8 | 94.3 | 97.2 | 97.3 | 99.0 | 103.6 | 105.8 | 104.7 | 100.9 | 98.5 | 142.9 |
| 10000 | 95.4 | 94.5 | 94.7 | 95.5 | 95.4 | 97.3 | 97.5 | 99.3 | 103.0 | 105.8 | 104.9 | 101.9 | 99.7 | 143.4 |
| 12500 | 96.3 | 96.3 | 96.1 | 96.8 | 96.8 | 98.4 | 97.1 | 99.3 | 101.6 | 104.4 | 103.7 | 101.9 | 100.9 | 143.5 |
| 16000 | 95.5 | 96.8 | 97.5 | 96.9 | 97.1 | 97.6 | 98.2 | 97.7 | 100.6 | 104.0 | 102.7 | 101.7 | 101.3 | 143.9 |
| 20000 | 93.0 | 95.1 | 95.0 | 96.4 | 97.5 | 97.9 | 95.7 | 97.2 | 99.9 | 101.8 | 100.7 | 99.7 | 100.0 | 144.0 |
| 25000 | 90.9 | 93.8 | 94.4 | 95.3 | 96.6 | 97.1 | 94.4 | 94.9 | 98.9 | 99.0 | 97.8 | 97.8 | 99.7 | 144.2 |
| 31500 | 87.2 | 91.9 | 92.3 | 91.6 | 94.2 | 94.8 | 91.7 | 91.6 | 96.0 | 97.3 | 94.9 | 92.4 | 94.7 | 143.7 |
| 40000 | 84.5 | 87.0 | 88.9 | 89.4 | 89.7 | 88.1 | 88.3 | 88.3 | 92.4 | 92.9 | 91.0 | 88.7 | 91.8 | 143.1 |
| 50000 | 82.5 | 81.9 | 85.5 | 85.2 | 87.9 | 87.6 | 83.4 | 84.1 | 88.2 | 86.6 | 85.1 | 84.3 | 87.0 | 142.9 |
| 63000 | 77.1 | 77.5 | 79.6 | 78.6 | 80.0 | 80.7 | 78.9 | 77.7 | 83.5 | 80.1 | 80.0 | 79.0 | 82.0 | 141.4 |
| 80000 | 68.7 | 69.5 | 71.3 | 71.4 | 71.3 | 71.9 | 73.4 | 71.1 | 77.9 | 74.7 | 74.5 | 70.7 | 74.5 | 139.9 |
| 100000 | 62.0 | 61.4 | 63.0 | 66.5 | 63.9 | 65.6 | 64.7 | 64.8 | 68.1 | 64.8 | 64.7 | 60.9 | 64.7 | 138.5 |
| GASPL | 104.9 | 105.3 | 105.8 | 106.2 | 107.7 | 107.9 | 107.5 | 109.4 | 113.9 | 117.7 | 117.6 | 115.0 | 111.9 | 156.1 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | REFRACTION CORRECTION - YES |
|------------------------------|------------------------------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) 48.00 | TURBULANCE CORRECTION - YES |

| | | | |
|-----------------------|-------------------|--------------|--------------|
| TEST DATE 03-16-78 | TAPE NO. N300 | ALPHA 5859 | TAMB 40.28 |
| LOCATION C41 ANECH CH | AERO. RDG. ADH146 | PAMB 29.5250 | RELHUM 21.80 |

| MODEL | TEST POINT | ACOUSTIC RANGE | ARC | SIZE | FREE-JET SPEED |
|-------|------------|-------------------|----------------------------|--------------------------------|----------------|
| 6 | 3013 | 12.2 M (40.0 FT) | 110.1 SQ CM (17.07 SQ IN) | MODEL 90.83 M/SEC (298.0 FPS) | |

07/19/79 18.286

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X30136

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 64.9 | 66.6 | 68.0 | 68.9 | 73.2 | 70.3 | 70.5 | 71.1 | 76.9 | 83.3 | 85.8 | 82.8 | 71.8 | 159.1 |
| 63 | 65.2 | 67.6 | 70.5 | 70.8 | 84.5 | 72.2 | 71.8 | 73.1 | 75.6 | 84.7 | 85.4 | 80.8 | 69.7 | 159.8 |
| 80 | 67.8 | 70.1 | 72.0 | 71.8 | 71.9 | 73.0 | 73.1 | 75.0 | 81.4 | 86.0 | 85.3 | 78.7 | 69.4 | 159.5 |
| 100 | 68.8 | 68.7 | 71.1 | 72.4 | 73.0 | 74.1 | 74.4 | 76.1 | 81.5 | 86.2 | 86.2 | 77.8 | 68.7 | 159.9 |
| 125 | 70.2 | 70.0 | 72.3 | 74.0 | 74.1 | 76.0 | 75.6 | 77.5 | 83.3 | 86.4 | 86.0 | 77.2 | 69.1 | 160.4 |
| 160 | 68.7 | 71.7 | 73.4 | 73.9 | 74.3 | 76.2 | 76.8 | 78.5 | 84.2 | 86.8 | 84.9 | 76.2 | 69.5 | 160.6 |
| 200 | 70.3 | 70.7 | 73.0 | 73.7 | 74.1 | 76.0 | 76.6 | 78.8 | 83.7 | 87.8 | 84.6 | 76.6 | 69.3 | 161.0 |
| 250 | 69.7 | 71.1 | 73.4 | 74.8 | 75.0 | 77.0 | 77.8 | 79.3 | 84.6 | 86.5 | 84.7 | 76.9 | 68.8 | 161.1 |
| 315 | 70.2 | 72.0 | 73.6 | 74.7 | 75.5 | 77.5 | 77.9 | 80.6 | 84.1 | 86.0 | 83.3 | 76.9 | 68.1 | 161.0 |
| 400 | 70.5 | 72.0 | 73.5 | 74.5 | 75.6 | 77.7 | 78.6 | 80.3 | 83.4 | 86.5 | 83.3 | 74.9 | 67.5 | 161.5 |
| 500 | 69.6 | 72.0 | 73.4 | 75.1 | 75.8 | 78.2 | 79.4 | 80.8 | 83.9 | 85.9 | 82.7 | 74.8 | 66.5 | 161.8 |
| 630 | 71.3 | 72.1 | 73.8 | 75.2 | 76.2 | 79.2 | 79.2 | 80.4 | 84.3 | 84.9 | 81.7 | 74.7 | 67.0 | 162.0 |
| 800 | 72.0 | 73.4 | 75.0 | 76.7 | 77.2 | 79.2 | 79.3 | 80.6 | 83.3 | 84.6 | 81.5 | 75.2 | 67.2 | 162.5 |
| 1000 | 72.7 | 75.0 | 76.3 | 78.1 | 78.6 | 80.4 | 78.9 | 80.6 | 81.9 | 83.2 | 80.1 | 74.7 | 67.5 | 162.7 |
| 1250 | 71.6 | 75.4 | 77.8 | 78.3 | 79.0 | 79.8 | 78.1 | 79.1 | 80.9 | 82.6 | 78.9 | 74.0 | 66.6 | 163.0 |
| 1600 | 68.8 | 73.7 | 75.4 | 78.0 | 79.7 | 80.3 | 77.9 | 78.8 | 80.3 | 80.4 | 76.5 | 71.1 | 63.6 | 163.1 |
| 2000 | 66.1 | 72.2 | 74.9 | 77.1 | 79.0 | 79.8 | 78.8 | 76.7 | 79.3 | 77.4 | 73.0 | 68.0 | 60.7 | 163.3 |
| 2500 | 61.3 | 69.7 | 72.5 | 73.3 | 76.7 | 77.6 | 74.0 | 73.2 | 76.2 | 75.0 | 69.0 | 60.4 | 51.3 | 162.8 |
| 3150 | 56.3 | 63.1 | 67.9 | 71.8 | 71.3 | 71.9 | 70.0 | 69.2 | 71.4 | 69.0 | 62.5 | 52.5 | 40.8 | 162.2 |
| 4000 | 48.6 | 54.1 | 61.6 | 63.7 | 67.7 | 67.8 | 63.2 | 62.6 | 64.3 | 58.8 | 51.1 | 40.0 | 22.3 | 162.1 |
| 5000 | 33.8 | 42.5 | 49.8 | 52.0 | 55.1 | 56.4 | 54.1 | 51.1 | 53.7 | 45.2 | 36.7 | 21.4 | | 160.5 |
| 6300 | 8.6 | 21.4 | 30.4 | 35.0 | 37.3 | 38.7 | 39.5 | 34.7 | 37.0 | 26.4 | 14.3 | | | 159.0 |
| 8000 | | | 2.2 | 12.3 | 13.3 | 16.1 | 14.1 | 10.6 | 7.4 | | | | | 157.6 |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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|-------|------|------|------|------|------|-------|------|------|-------|-------|------|------|------|-------|
| GASPL | 82.2 | 84.5 | 86.5 | 87.9 | 90.2 | 90.3 | 89.7 | 91.2 | 95.0 | 97.6 | 95.9 | 89.4 | 80.7 | 175.0 |
| PWL | 88.9 | 93.0 | 95.6 | 97.5 | 99.3 | 100.1 | 98.4 | 98.9 | 102.1 | 102.9 | 99.9 | 92.9 | 84.6 | |
| PWL | 90.1 | 94.1 | 95.6 | 97.5 | 99.3 | 100.1 | 99.0 | 98.9 | 102.6 | 102.9 | 99.9 | 92.9 | 84.6 | |

DIAMETER RATIO 9.056 FREQUENCY SHIFT -10

TEST DATE 03-16-78 TAPE NO. N300 ALPHA SB59 TAMB 40.28
 LOCATION C41 ANECH CH AERO. RDG. ADH146 PAMB 29.5250 RELHUM 21.80

MODEL TEST POINT 3013 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 90.83 M/SEC (298.0 FPS) FREE-JET SPEED

07/19/79 18.286

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 88 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X30140
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. FWL

FREQ
50
63
80

100
125
160
200

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|-------|------|------|------|-------|-------|-------|-------|-------|-------|
| 250 | 76.4 | 76.3 | 76.3 | 79.3 | 79.3 | 82.2 | 84.3 | 86.0 | 86.3 | 85.0 | 100.0 | 103.2 | 101.9 | 136.1 |
| 315 | 76.8 | 76.3 | 79.3 | 79.6 | 81.6 | 83.6 | 84.4 | 86.2 | 80.4 | 97.4 | 102.1 | 104.1 | 101.2 | 137.3 |
| 400 | 78.8 | 79.9 | 80.4 | 80.7 | 82.5 | 84.7 | 85.5 | 87.5 | 91.5 | 101.3 | 104.4 | 104.6 | 98.2 | 136.8 |
| 500 | 79.2 | 80.3 | 83.1 | 82.1 | 91.4 | 85.6 | 86.7 | 88.7 | 93.2 | 102.6 | 106.5 | 103.9 | 94.1 | 139.8 |
| 630 | 79.6 | 81.4 | 84.5 | 83.5 | 103.5 | 87.0 | 87.9 | 90.6 | 95.3 | 103.2 | 106.9 | 102.5 | 91.4 | 141.2 |
| 800 | 82.5 | 81.5 | 84.1 | 84.8 | 85.9 | 88.0 | 89.2 | 92.9 | 97.7 | 104.6 | 106.6 | 99.6 | 90.2 | 140.2 |
| 1000 | 83.9 | 82.9 | 85.7 | 85.5 | 86.8 | 89.2 | 90.6 | 94.0 | 99.3 | 105.4 | 106.5 | 96.7 | 89.1 | 140.1 |
| 1250 | 83.3 | 85.3 | 86.9 | 87.4 | 88.2 | 90.9 | 91.7 | 95.4 | 100.2 | 105.5 | 106.1 | 96.3 | 88.7 | 140.6 |
| 1600 | 85.4 | 84.3 | 86.1 | 87.1 | 88.7 | 91.3 | 93.2 | 96.1 | 101.1 | 105.5 | 105.6 | 96.6 | 87.8 | 140.7 |
| 2000 | 84.6 | 85.2 | 86.7 | 87.2 | 88.3 | 90.6 | 93.3 | 96.7 | 102.0 | 106.6 | 104.5 | 96.0 | 89.5 | 141.0 |
| 2500 | 85.3 | 85.9 | 87.7 | 88.4 | 89.2 | 92.1 | 94.5 | 97.9 | 102.2 | 106.8 | 104.2 | 95.9 | 88.6 | 141.3 |
| 3150 | 86.2 | 86.5 | 87.2 | 89.0 | 90.0 | 93.4 | 95.1 | 99.0 | 102.8 | 105.9 | 104.1 | 96.7 | 88.5 | 141.2 |
| 4000 | 87.0 | 86.9 | 88.1 | 88.6 | 90.4 | 92.6 | 94.9 | 98.9 | 101.9 | 105.1 | 103.4 | 96.1 | 88.1 | 140.7 |
| 5000 | 88.7 | 87.6 | 88.8 | 89.8 | 90.6 | 93.9 | 95.6 | 99.3 | 101.8 | 105.3 | 102.8 | 95.7 | 88.5 | 140.9 |
| 6300 | 89.4 | 89.1 | 89.9 | 89.6 | 90.8 | 94.4 | 95.9 | 99.1 | 102.0 | 104.5 | 102.0 | 96.3 | 89.5 | 140.8 |
| 8000 | 91.6 | 92.3 | 91.1 | 90.7 | 91.3 | 93.9 | 95.7 | 98.6 | 101.6 | 103.7 | 101.5 | 95.6 | 90.1 | 140.8 |
| 10000 | 90.7 | 92.1 | 93.8 | 92.6 | 93.0 | 94.9 | 95.0 | 98.6 | 100.9 | 103.2 | 101.1 | 96.2 | 90.0 | 141.2 |
| 12500 | 88.6 | 90.5 | 91.9 | 92.0 | 93.5 | 94.9 | 94.6 | 97.5 | 98.5 | 101.5 | 99.8 | 95.9 | 89.8 | 140.7 |
| 16000 | 87.8 | 89.1 | 90.4 | 91.8 | 93.4 | 95.4 | 93.6 | 96.5 | 97.5 | 100.5 | 98.3 | 95.0 | 89.5 | 141.2 |
| 20000 | 82.6 | 86.7 | 88.0 | 89.6 | 92.3 | 94.2 | 91.6 | 93.7 | 95.4 | 97.1 | 95.5 | 92.7 | 88.4 | 140.5 |
| 25000 | 81.1 | 82.6 | 85.3 | 86.1 | 90.5 | 91.1 | 89.2 | 89.4 | 93.1 | 92.4 | 91.2 | 89.4 | 86.7 | 139.6 |
| 31500 | 79.4 | 79.1 | 83.3 | 84.9 | 85.4 | 86.5 | 85.6 | 87.1 | 90.1 | 91.2 | 88.4 | 84.4 | 81.5 | 139.8 |
| 40000 | 74.7 | 74.8 | 77.7 | 79.7 | 83.9 | 84.9 | 81.2 | 82.5 | 85.2 | 85.4 | 83.4 | 79.4 | 77.6 | 139.8 |
| 50000 | 67.5 | 67.6 | 70.6 | 73.0 | 75.5 | 77.5 | 76.4 | 76.4 | 80.5 | 78.4 | 76.4 | 73.9 | 71.6 | 137.5 |
| 63000 | 62.2 | 61.4 | 64.3 | 66.7 | 67.8 | 68.7 | 70.7 | 68.8 | 75.2 | 71.0 | 70.2 | 68.1 | 65.7 | 136.3 |
| 80000 | 55.5 | 54.3 | 57.8 | 61.3 | 60.2 | 62.9 | 62.4 | 62.6 | 68.0 | 64.3 | 64.2 | 59.4 | 56.6 | 136.2 |

OASPL 99.5 100.2 101.4 101.7 106.4 105.4 106.1 109.4 112.8 117.0 116.9 112.7 107.2 154.2

TEST DATE 03-16-78 TAPE NO. N300 ALPHA SB59 TAMB 40.64
LOCATION C41 ANECH CH AERO. RDG. ADH145 PAMB 29.5100 RELHUM 22.00

MODEL TEST POINT 3014 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 110.1 SQ CM (17.07 SQ IN) - MODEL 117.04 M/SEC (384.0 FPS) FREE-JET SPEED

459

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07/19/79 18.286

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X30140

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 83.0 | 83.6 | 82.6 | 82.2 | 81.3 | 82.2 | 82.4 | 82.5 | 87.3 | 93.4 | 97.6 | 99.9 | 98.6 | 133.6 |
| 315 | 83.0 | 83.6 | 82.6 | 82.2 | 83.3 | 84.0 | 83.4 | 83.6 | 89.6 | 96.9 | 102.0 | 103.4 | 99.5 | 137.0 |
| 400 | 84.1 | 84.4 | 84.0 | 83.0 | 84.2 | 84.9 | 84.7 | 85.7 | 90.7 | 99.7 | 103.6 | 102.6 | 96.4 | 137.5 |
| 500 | 86.0 | 85.8 | 85.1 | 83.9 | 83.7 | 85.9 | 85.6 | 86.4 | 93.1 | 100.5 | 104.2 | 101.9 | 95.6 | 138.1 |
| 630 | 89.2 | 88.6 | 89.5 | 86.5 | 105.9 | 87.4 | 86.8 | 88.3 | 95.7 | 102.3 | 104.4 | 99.9 | 96.5 | 141.2 |
| 800 | 89.6 | 89.8 | 91.0 | 88.0 | 87.9 | 88.5 | 88.2 | 90.6 | 97.7 | 103.4 | 103.9 | 98.1 | 97.4 | 136.8 |
| 1000 | 89.9 | 87.7 | 88.9 | 88.2 | 88.9 | 89.8 | 89.7 | 91.8 | 98.7 | 103.6 | 104.6 | 97.7 | 96.8 | 139.3 |
| 1250 | 91.3 | 89.1 | 90.6 | 89.0 | 90.4 | 91.6 | 91.0 | 93.4 | 99.9 | 103.8 | 104.4 | 98.2 | 96.2 | 139.6 |
| 1600 | 90.6 | 91.6 | 91.8 | 91.0 | 91.0 | 92.2 | 92.7 | 94.3 | 101.0 | 105.2 | 103.5 | 97.9 | 98.2 | 140.3 |
| 2000 | 92.8 | 90.5 | 91.1 | 90.8 | 90.8 | 91.8 | 93.0 | 95.1 | 101.6 | 105.8 | 103.6 | 98.3 | 97.8 | 140.8 |
| 2500 | 92.0 | 91.5 | 91.8 | 91.0 | 92.0 | 93.6 | 94.5 | 96.7 | 102.7 | 105.4 | 104.0 | 98.6 | 98.1 | 141.2 |
| 3150 | 92.6 | 92.2 | 92.8 | 92.4 | 93.1 | 95.3 | 95.5 | 98.2 | 102.4 | 105.3 | 104.0 | 99.6 | 98.2 | 141.4 |
| 4000 | 93.4 | 92.8 | 92.5 | 93.1 | 93.9 | 95.1 | 95.9 | 98.6 | 102.6 | 105.6 | 103.5 | 99.2 | 98.6 | 141.7 |
| 5000 | 94.2 | 93.3 | 93.6 | 93.0 | 94.5 | 96.9 | 97.1 | 99.4 | 102.9 | 105.1 | 103.0 | 100.3 | 100.5 | 142.0 |
| 6300 | 95.8 | 94.2 | 94.4 | 94.5 | 94.8 | 97.4 | 97.4 | 99.2 | 102.9 | 104.7 | 102.9 | 100.3 | 102.0 | 142.3 |
| 8000 | 96.4 | 95.4 | 95.3 | 94.1 | 95.0 | 96.9 | 97.3 | 98.8 | 102.5 | 104.5 | 103.0 | 101.3 | 102.4 | 142.7 |
| 10000 | 97.0 | 97.4 | 95.8 | 94.7 | 97.0 | 97.9 | 96.7 | 99.0 | 101.0 | 103.7 | 102.7 | 102.0 | 103.1 | 143.2 |
| 12500 | 97.3 | 98.0 | 98.8 | 96.8 | 97.5 | 97.9 | 96.7 | 98.3 | 101.0 | 103.8 | 102.2 | 102.1 | 103.5 | 144.3 |
| 16000 | 94.5 | 95.8 | 96.4 | 95.6 | 97.4 | 98.4 | 95.9 | 97.8 | 99.8 | 101.0 | 99.6 | 99.5 | 101.9 | 144.0 |
| 20000 | 93.4 | 94.0 | 94.5 | 94.9 | 96.8 | 97.2 | 94.0 | 95.4 | 96.2 | 94.9 | 94.0 | 95.1 | 99.1 | 143.1 |
| 25000 | 90.2 | 93.2 | 93.1 | 93.2 | 95.0 | 94.1 | 90.8 | 89.5 | 95.9 | 96.7 | 94.5 | 93.5 | 97.3 | 143.9 |
| 31500 | 88.0 | 88.5 | 89.6 | 89.0 | 89.4 | 89.5 | 88.1 | 88.8 | 90.6 | 90.3 | 88.4 | 87.2 | 92.0 | 142.4 |
| 40000 | 82.8 | 81.7 | 85.2 | 85.9 | 88.4 | 87.9 | 82.9 | 83.1 | 85.7 | 83.0 | 81.3 | 81.7 | 86.2 | 142.2 |
| 50000 | 80.3 | 79.2 | 80.9 | 81.3 | 80.0 | 80.5 | 77.9 | 76.5 | 81.2 | 76.5 | 76.0 | 76.8 | 81.1 | 141.0 |
| 63000 | 72.2 | 71.1 | 72.8 | 73.7 | 71.7 | 71.7 | 72.2 | 68.9 | 77.7 | 73.8 | 74.2 | 72.3 | 76.5 | 140.2 |
| 80000 | 62.8 | 61.3 | 63.4 | 64.8 | 64.7 | 65.9 | 64.9 | 64.4 | 67.9 | 64.0 | 64.4 | 62.5 | 66.7 | 138.4 |
| GASPL | 106.2 | 106.1 | 106.4 | 105.6 | 109.4 | 107.8 | 107.2 | 109.1 | 113.3 | 116.5 | 116.1 | 113.3 | 112.9 | 155.5 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 384.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 03-16-78 | TAPE NO. | N300 | ALPHA | SB59 | TAMB | 40.84 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH145 | PAMB | 29.5100 | RELHUM | 22.00 |

| MODEL | TEST POINT | ACUSTIC RANGE | 12.2 M (40.0 FT) ARC | 110.1 SQ CH (17.07 SQ IN) - MODEL | 117.04 M/SEC (384.0 FPS) |
|-------|------------|---------------|-----------------------|------------------------------------|---------------------------|
| 6 | 3014 | | | | |

07/19/79 18.286

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X30145

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 65.7 | 67.1 | 67.4 | 66.9 | 77.2 | 69.4 | 69.1 | 69.4 | 75.4 | 81.7 | 83.9 | 79.4 | 69.7 | 157.2 |
| 63 | 68.9 | 69.8 | 71.8 | 69.5 | 89.4 | 70.9 | 70.2 | 71.3 | 78.0 | 83.5 | 84.1 | 77.4 | 70.6 | 160.3 |
| 80 | 69.3 | 70.9 | 73.2 | 70.9 | 71.3 | 72.0 | 71.6 | 73.6 | 79.9 | 84.5 | 83.5 | 75.5 | 71.4 | 158.0 |
| 100 | 69.4 | 68.8 | 71.1 | 70.2 | 72.2 | 73.3 | 73.1 | 74.8 | 80.9 | 84.7 | 84.1 | 74.9 | 70.6 | 158.4 |
| 125 | 70.7 | 70.1 | 72.7 | 71.8 | 73.7 | 75.0 | 74.3 | 76.2 | 82.0 | 84.8 | 83.8 | 75.4 | 69.8 | 158.8 |
| 160 | 69.9 | 72.4 | 73.8 | 73.7 | 74.1 | 75.5 | 75.8 | 77.0 | 83.0 | 86.1 | 82.8 | 74.8 | 71.4 | 159.5 |
| 200 | 71.8 | 71.2 | 72.9 | 73.3 | 73.8 | 75.0 | 76.0 | 77.7 | 83.4 | 86.5 | 82.7 | 74.9 | 70.6 | 159.9 |
| 250 | 70.7 | 71.9 | 73.4 | 73.4 | 74.8 | 76.5 | 77.4 | 79.0 | 84.3 | 85.9 | 82.7 | 75.8 | 70.3 | 160.3 |
| 315 | 70.9 | 72.3 | 74.2 | 74.5 | 75.7 | 78.0 | 78.1 | 80.3 | 83.7 | 85.3 | 82.3 | 75.2 | 69.6 | 160.6 |
| 400 | 71.2 | 72.6 | 73.5 | 75.0 | 76.2 | 77.6 | 78.2 | 80.5 | 83.6 | 85.3 | 81.3 | 74.3 | 69.1 | 160.8 |
| 500 | 71.6 | 72.7 | 74.3 | 74.6 | 76.6 | 79.1 | 79.1 | 81.0 | 83.7 | 84.5 | 80.4 | 74.7 | 70.0 | 161.2 |
| 630 | 72.8 | 73.3 | 74.9 | 75.8 | 76.7 | 79.5 | 79.3 | 80.6 | 83.4 | 83.7 | 79.9 | 74.1 | 70.5 | 161.5 |
| 800 | 73.1 | 74.2 | 75.7 | 75.4 | 76.8 | 79.9 | 79.1 | 80.1 | 82.8 | 83.4 | 79.6 | 74.6 | 69.9 | 161.9 |
| 1000 | 73.4 | 76.1 | 76.0 | 76.0 | 78.8 | 79.9 | 78.6 | 80.2 | 81.2 | 82.4 | 79.1 | 74.8 | 69.6 | 162.4 |
| 1250 | 73.4 | 76.6 | 79.1 | 78.1 | 79.4 | 80.0 | 78.8 | 79.7 | 81.3 | 82.4 | 78.4 | 74.4 | 68.9 | 163.4 |
| 1600 | 70.4 | 74.4 | 76.8 | 77.1 | 79.6 | 80.8 | 78.1 | 79.3 | 80.2 | 79.6 | 75.4 | 71.0 | 65.4 | 163.2 |
| 2000 | 68.7 | 72.4 | 75.0 | 76.7 | 79.3 | 79.8 | 76.5 | 77.2 | 76.6 | 73.3 | 69.3 | 65.3 | 60.0 | 162.3 |
| 2500 | 64.3 | 71.0 | 73.3 | 74.9 | 77.5 | 76.8 | 73.1 | 71.2 | 76.0 | 74.5 | 68.6 | 61.5 | 53.9 | 163.0 |
| 3150 | 59.5 | 64.6 | 68.7 | 69.9 | 71.3 | 71.7 | 70.0 | 69.7 | 69.6 | 66.4 | 59.9 | 51.0 | 41.0 | 161.5 |
| 4000 | 48.9 | 54.0 | 61.2 | 64.3 | 68.2 | 68.1 | 62.7 | 61.6 | 61.8 | 55.2 | 47.4 | 37.4 | 21.6 | 161.4 |
| 5000 | 37.0 | 44.3 | 51.1 | 54.8 | 55.1 | 56.2 | 53.1 | 49.9 | 51.4 | 41.5 | 32.7 | 19.2 | 160.2 | |
| 6300 | 12.1 | 22.9 | 31.9 | 37.3 | 37.8 | 38.5 | 38.2 | 32.6 | 36.8 | 25.6 | 14.0 | | 159.3 | |
| 8000 | | | | | | | | | | | | | 157.5 | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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| | | | | | | | | | | | | | | |
|--------|------|------|------|------|-------|-------|------|------|-------|-------|------|------|------|-------|
| GNASPL | 83.5 | 85.3 | 87.1 | 87.2 | 92.3 | 90.2 | 89.4 | 90.9 | 94.4 | 96.4 | 94.1 | 87.5 | 82.1 | 174.5 |
| PNL | 90.6 | 93.8 | 96.2 | 97.1 | 99.7 | 100.1 | 98.0 | 99.9 | 101.2 | 101.6 | 98.0 | 92.0 | 86.3 | |
| PNLT | 92.1 | 95.1 | 97.2 | 97.6 | 100.8 | 100.1 | 98.5 | 98.9 | 102.1 | 103.2 | 98.0 | 92.0 | 86.3 | |

DIAMETER RATIO 9.056 FREQUENCY SHIFT -10

TEST DATE 03-16-78 TAPE NO. N300 ALPHA SB59 TAMB 40.64
LOCATION C41 ANECH CH AERO. RDG. ADH145 PAMB 29.5100 RELHUM 22.00

MODEL TEST POINT 3014 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 117.04 M/SEC (384.0 FPS) FREE-JET SPEED

07/19/79 10.286

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X30150
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

15000

20000

25000

31500

40000

50000

63000

80000

CASPL

104.1

106.0

106.5

110.6

110.6

110.6

113.5

116.8

121.7

124.8

124.4

122.3

160.4

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TEST DATE 03-16-78

LOCATION C41 ANECH CH

TAPE NO. N300

AERO. RDG. ADH141

ALPHA SB59

PAMB 29.5000

TAMB 39.92

RELHUM 22.40

MODEL TEST POINT

3015

ACCUSTIC RANGE

12.2 M (40.0 FT) ARC

SIZE

110.1 SQ CM (17.07 SQ IN) - MODEL

FREE-JET SPEED

0. M/SEC (0. FPS)

07/19/79 10.206

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X30150

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 81.5 | 85.6 | 84.6 | 85.6 | 86.5 | 86.6 | 90.7 | 92.1 | 95.3 | 101.7 | 106.3 | 109.0 | 108.1 | 142.3 |
| 315 | 82.6 | 85.2 | 86.2 | 86.5 | 87.8 | 90.7 | 91.3 | 93.5 | 96.9 | 103.6 | 108.6 | 111.1 | 109.5 | 144.3 |
| 400 | 84.2 | 86.7 | 87.5 | 87.0 | 88.8 | 91.2 | 92.3 | 94.0 | 96.7 | 103.6 | 111.7 | 112.6 | 110.3 | 146.5 |
| 500 | 85.5 | 87.8 | 89.0 | 88.6 | 95.4 | 92.3 | 93.4 | 95.3 | 100.3 | 110.1 | 113.2 | 113.7 | 110.6 | 147.9 |
| 630 | 86.6 | 89.4 | 90.4 | 89.9 | 107.3 | 94.2 | 94.5 | 97.4 | 101.9 | 110.5 | 115.1 | 114.5 | 111.9 | 149.5 |
| 800 | 90.4 | 89.2 | 90.7 | 91.7 | 92.6 | 94.7 | 96.1 | 99.5 | 103.9 | 111.3 | 114.9 | 114.8 | 112.7 | 149.5 |
| 1000 | 95.0 | 95.0 | 95.6 | 94.3 | 93.7 | 95.5 | 97.2 | 99.8 | 104.8 | 110.4 | 114.0 | 114.2 | 112.6 | 148.9 |
| 1250 | 91.1 | 93.9 | 95.2 | 95.5 | 96.5 | 96.7 | 99.0 | 101.2 | 104.9 | 110.0 | 114.6 | 112.5 | 114.3 | 149.3 |
| 1600 | 92.7 | 91.8 | 92.9 | 93.9 | 94.7 | 97.1 | 99.0 | 101.9 | 105.9 | 110.7 | 113.7 | 113.9 | 112.1 | 148.9 |
| 2000 | 94.2 | 95.0 | 95.2 | 94.2 | 94.8 | 96.9 | 98.8 | 102.0 | 106.2 | 110.6 | 113.3 | 113.0 | 110.2 | 148.4 |
| 2500 | 92.6 | 93.4 | 94.4 | 94.7 | 96.0 | 97.9 | 99.6 | 102.4 | 106.2 | 110.6 | 112.5 | 111.9 | 109.2 | 147.9 |
| 3150 | 94.2 | 95.0 | 94.5 | 95.3 | 95.6 | 97.9 | 99.6 | 103.5 | 106.5 | 110.7 | 112.6 | 110.5 | 108.0 | 147.8 |
| 4000 | 93.5 | 93.6 | 94.2 | 93.6 | 94.9 | 98.1 | 99.2 | 102.9 | 106.2 | 109.3 | 111.7 | 108.6 | 107.1 | 146.9 |
| 5000 | 93.2 | 93.8 | 93.8 | 94.0 | 95.3 | 97.7 | 99.3 | 103.0 | 105.3 | 109.0 | 110.6 | 107.7 | 105.7 | 146.4 |
| 6300 | 91.9 | 94.3 | 93.9 | 93.6 | 95.3 | 98.2 | 99.1 | 102.3 | 104.7 | 108.0 | 109.8 | 107.0 | 106.2 | 146.0 |
| 8000 | 92.1 | 95.8 | 94.9 | 94.0 | 95.5 | 97.4 | 98.5 | 101.6 | 104.3 | 106.4 | 108.7 | 106.1 | 104.6 | 145.4 |
| 10000 | 90.2 | 95.6 | 96.3 | 94.6 | 95.5 | 97.6 | 97.5 | 101.1 | 102.8 | 105.5 | 107.1 | 106.1 | 104.3 | 145.0 |
| 12500 | 83.3 | 94.5 | 94.6 | 95.2 | 96.2 | 96.9 | 98.3 | 99.2 | 100.3 | 103.2 | 104.6 | 102.9 | 102.1 | 143.9 |
| 16000 | 86.1 | 92.6 | 94.2 | 94.2 | 96.7 | 97.7 | 98.1 | 98.0 | 99.3 | 101.7 | 102.0 | 100.3 | 100.0 | 143.8 |
| 20000 | 81.0 | 89.7 | 90.7 | 92.5 | 95.8 | 96.2 | 92.8 | 94.9 | 96.6 | 98.1 | 98.9 | 97.2 | 97.2 | 142.9 |
| 25000 | 79.4 | 85.0 | 87.5 | 88.6 | 92.9 | 93.6 | 90.4 | 90.6 | 94.1 | 93.4 | 95.4 | 93.1 | 93.9 | 141.9 |
| 31500 | 77.6 | 81.3 | 85.2 | 87.6 | 87.9 | 87.9 | 86.8 | 87.6 | 90.6 | 92.6 | 92.7 | 88.6 | 89.2 | 141.8 |
| 40000 | 72.9 | 76.7 | 80.5 | 82.2 | 85.9 | 86.1 | 81.9 | 82.7 | 85.2 | 86.9 | 87.1 | 83.4 | 85.1 | 141.2 |
| 50000 | 66.0 | 70.3 | 72.8 | 75.5 | 78.2 | 79.2 | 77.4 | 76.1 | 80.9 | 80.4 | 81.7 | 78.4 | 78.8 | 139.5 |
| 63000 | 60.5 | 63.6 | 66.8 | 69.7 | 72.5 | 70.7 | 71.7 | 69.8 | 75.9 | 74.2 | 75.6 | 73.6 | 73.4 | 138.6 |
| 80000 | 55.0 | 56.6 | 61.3 | 64.5 | 63.2 | 65.3 | 63.9 | 64.1 | 69.8 | 67.8 | 72.2 | 68.1 | 67.3 | 139.7 |
| GASPL | 104.1 | 106.0 | 106.5 | 106.4 | 110.6 | 109.6 | 110.4 | 113.5 | 116.8 | 121.7 | 124.8 | 124.4 | 122.3 | 160.4 |

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TURBULANCE CORRECTION - YESFREE JET VELOCITY (FT/SEC) 0.
FREE JET DIAMETER (IN) 48.00

| TEST DATE | 03-16-78 | TAPE NO. | N300 | ALPHA | SB59 | TAB | 39.92 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH141 | PAMB | 29.5000 | RELHUM | 22.40 |

| MODEL | TEST POINT | ACOUSTIC RANGE | ARC | 110.1 SQ CM (57.07 SQ IN) - MODEL | 0. | M/SEC (0. FPS) |
|-------|------------|-------------------|-----|------------------------------------|----|-----------------|
| 6 | 3015 | 12.2 M (40.0 FT) | ARC | 110.1 SQ CM (57.07 SQ IN) - MODEL | 0. | M/SEC (0. FPS) |

07/19/79 10.206

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X30155

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 65.2 | 69.0 | 71.4 | 71.6 | 78.9 | 75.9 | 76.9 | 78.9 | 82.6 | 91.4 | 93.0 | 91.2 | 88.0 | 167.1 |
| 63 | 66.3 | 70.6 | 72.7 | 72.9 | 90.7 | 77.7 | 77.9 | 80.4 | 84.2 | 91.7 | 94.8 | 92.0 | 86.1 | 168.7 |
| 80 | 70.0 | 70.3 | 72.9 | 74.7 | 76.0 | 78.2 | 79.5 | 82.5 | 86.2 | 92.4 | 94.5 | 92.2 | 86.7 | 168.6 |
| 100 | 74.5 | 76.1 | 77.8 | 77.3 | 77.0 | 79.0 | 80.5 | 82.8 | 87.0 | 91.5 | 93.5 | 91.5 | 86.4 | 168.1 |
| 125 | 70.5 | 74.9 | 77.3 | 78.3 | 79.8 | 82.1 | 82.3 | 84.1 | 87.1 | 91.0 | 94.1 | 91.9 | 86.1 | 168.5 |
| 160 | 72.0 | 72.7 | 74.9 | 76.6 | 77.9 | 80.4 | 82.1 | 84.6 | 87.8 | 91.6 | 92.9 | 90.8 | 85.4 | 168.0 |
| 200 | 73.2 | 75.6 | 77.0 | 76.8 | 77.5 | 80.1 | 81.8 | 84.6 | 88.0 | 91.3 | 92.3 | 89.6 | 83.0 | 167.6 |
| 250 | 71.3 | 73.8 | 76.0 | 77.1 | 78.8 | 80.8 | 82.3 | 84.8 | 87.8 | 91.0 | 91.2 | 88.1 | 81.3 | 167.1 |
| 315 | 72.5 | 75.1 | 75.8 | 77.4 | 78.2 | 80.7 | 82.2 | 85.6 | 87.8 | 90.8 | 90.9 | 86.1 | 79.3 | 167.0 |
| 400 | 71.4 | 73.4 | 75.2 | 75.5 | 77.3 | 80.5 | 81.5 | 84.7 | 87.2 | 89.0 | 89.8 | 83.9 | 77.5 | 166.1 |
| 500 | 70.6 | 73.2 | 74.5 | 75.6 | 77.4 | 79.9 | 81.4 | 84.6 | 86.0 | 88.4 | 88.0 | 82.1 | 75.2 | 165.5 |
| 630 | 68.9 | 73.4 | 74.3 | 75.0 | 77.2 | 80.2 | 81.0 | 83.7 | 85.2 | 87.1 | 86.8 | 80.9 | 74.7 | 162.1 |
| 800 | 68.7 | 74.6 | 75.2 | 75.2 | 77.3 | 79.4 | 80.3 | 82.8 | 84.6 | 85.3 | 85.3 | 78.4 | 72.1 | 164.5 |
| 1000 | 66.6 | 74.3 | 76.6 | 75.9 | 77.3 | 79.6 | 79.3 | 82.3 | 83.1 | 84.2 | 83.5 | 77.9 | 70.8 | 164.1 |
| 1250 | 64.4 | 73.1 | 74.9 | 76.6 | 78.2 | 79.0 | 78.3 | 80.6 | 80.6 | 81.8 | 81.0 | 75.1 | 67.4 | 163.0 |
| 1600 | 61.9 | 71.2 | 74.6 | 75.8 | 78.9 | 80.1 | 77.3 | 79.5 | 79.7 | 80.3 | 77.8 | 71.7 | 63.5 | 162.9 |
| 2000 | 56.3 | 69.1 | 71.1 | 74.3 | 78.3 | 78.8 | 75.3 | 76.6 | 77.1 | 76.4 | 74.2 | 67.4 | 58.1 | 162.0 |
| 2500 | 53.4 | 62.8 | 67.7 | 70.2 | 75.4 | 76.3 | 72.9 | 72.3 | 74.3 | 71.1 | 69.5 | 61.1 | 50.5 | 161.0 |
| 3150 | 49.1 | 57.4 | 64.3 | 68.5 | 69.8 | 70.2 | 68.7 | 68.5 | 69.9 | 68.7 | 64.1 | 52.4 | 38.2 | 160.9 |
| 4000 | 39.0 | 49.0 | 56.5 | 60.6 | 65.7 | 66.3 | 61.7 | 61.2 | 61.3 | 59.1 | 53.2 | 39.1 | 20.3 | 160.3 |
| 5000 | 22.7 | 35.4 | 43.1 | 48.9 | 53.4 | 54.9 | 52.6 | 49.5 | 51.1 | 45.5 | 38.4 | 20.8 | | 158.6 |
| 6300 | 0.3 | 15.4 | 25.9 | 33.2 | 35.5 | 37.5 | 37.7 | 33.4 | 35.0 | 26.0 | 15.5 | | | 157.8 |
| 8000 | | | 0.6 | 10.3 | 12.6 | 15.9 | 13.2 | 9.9 | 9.0 | | | | | 158.9 |

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|-------|------|------|------|------|------|-------|------|-------|-------|-------|-------|-------|------|-------|
| CASPL | 82.4 | 85.8 | 87.6 | 83.4 | 93.5 | 92.2 | 92.6 | 95.4 | 96.0 | 101.9 | 103.3 | 100.6 | 94.7 | 179.2 |
| PWL | 86.4 | 91.8 | 94.7 | 96.3 | 99.6 | 100.5 | 99.2 | 101.3 | 103.3 | 103.6 | 105.7 | 101.6 | 95.0 | |
| PWLT | 87.1 | 92.4 | 94.7 | 96.3 | 99.6 | 100.5 | 99.7 | 101.3 | 103.8 | 105.6 | 105.7 | 101.6 | 95.0 | |

DIAMETER RATIO 9.056 FREQUENCY SHIFT -10

TEST DATE 03-16-78 TAPE NO. N300 ALPHA SB59 TAMB 39.92
 LOCATION C41 ANECH CH AERO. RDG. ADH141 PAMB 29.5000 RELHUM 22.40

MODEL TEST POINT 3015 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS) FREE-JET SPEED

07/19/79 15.266

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X30160
 BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 78.0 | 81.3 | 81.0 | 82.1 | 82.7 | 84.6 | 86.9 | 88.3 | 91.3 | 95.1 | 102.6 | 106.0 | 108.1 | 139.0 |
| 315 | 79.6 | 80.8 | 81.6 | 82.4 | 84.0 | 86.9 | 87.0 | 89.2 | 93.2 | 100.5 | 104.6 | 109.1 | 105.2 | 140.7 |
| 400 | 81.6 | 83.2 | 83.7 | 85.1 | 87.2 | 88.1 | 89.2 | 91.6 | 95.2 | 104.5 | 107.9 | 109.1 | 103.6 | 142.6 |
| 500 | 82.7 | 83.8 | 85.9 | 85.3 | 87.9 | 88.3 | 89.7 | 91.6 | 96.8 | 106.4 | 109.7 | 109.2 | 101.3 | 143.7 |
| 630 | 84.8 | 84.6 | 86.1 | 86.2 | 87.3 | 89.9 | 91.3 | 93.9 | 98.4 | 107.2 | 111.1 | 108.5 | 97.7 | 144.5 |
| 800 | 85.4 | 84.7 | 86.7 | 86.7 | 88.6 | 91.2 | 92.6 | 95.7 | 100.2 | 108.5 | 111.6 | 107.6 | 95.0 | 144.9 |
| 1000 | 87.2 | 86.3 | 88.6 | 88.1 | 89.9 | 92.5 | 93.7 | 97.1 | 101.8 | 109.4 | 110.8 | 105.2 | 93.8 | 144.3 |
| 1250 | 88.1 | 88.2 | 89.4 | 90.2 | 91.5 | 93.9 | 94.6 | 98.2 | 102.2 | 108.3 | 110.9 | 104.5 | 93.0 | 144.4 |
| 1600 | 87.2 | 86.6 | 89.9 | 91.3 | 93.6 | 95.3 | 95.3 | 99.1 | 103.1 | 107.7 | 110.2 | 103.1 | 92.9 | 144.0 |
| 2000 | 86.7 | 87.5 | 89.0 | 90.8 | 93.4 | 95.6 | 95.6 | 99.2 | 103.5 | 108.8 | 108.5 | 102.0 | 92.5 | 143.8 |
| 2500 | 86.4 | 88.2 | 89.2 | 90.2 | 91.5 | 93.9 | 96.0 | 99.4 | 103.7 | 108.6 | 108.5 | 101.9 | 92.7 | 143.8 |
| 3150 | 86.9 | 88.5 | 89.0 | 90.3 | 91.6 | 94.2 | 96.6 | 100.5 | 104.0 | 107.7 | 108.1 | 101.5 | 92.5 | 143.5 |
| 4000 | 87.5 | 89.4 | 89.9 | 91.4 | 94.3 | 96.4 | 99.9 | 103.2 | 106.8 | 106.9 | 100.1 | 91.3 | 91.3 | 142.7 |
| 5000 | 88.2 | 89.3 | 90.0 | 91.6 | 94.4 | 96.3 | 100.8 | 102.6 | 107.0 | 105.8 | 99.5 | 90.7 | 90.7 | 142.6 |
| 6300 | 90.2 | 89.8 | 90.4 | 90.8 | 91.6 | 94.9 | 95.6 | 100.1 | 102.7 | 105.8 | 105.3 | 98.0 | 91.7 | 142.3 |
| 8000 | 92.1 | 92.2 | 91.4 | 90.5 | 92.0 | 94.4 | 96.0 | 98.8 | 102.3 | 104.7 | 104.7 | 99.1 | 91.9 | 142.1 |
| 10000 | 92.0 | 93.4 | 93.5 | 92.4 | 92.5 | 94.6 | 95.2 | 98.8 | 100.8 | 105.0 | 103.6 | 99.1 | 92.2 | 142.4 |
| 12500 | 89.8 | 92.4 | 92.4 | 92.7 | 93.7 | 94.1 | 94.1 | 97.4 | 99.8 | 102.9 | 102.1 | 97.8 | 91.6 | 141.8 |
| 16000 | 87.5 | 91.1 | 92.4 | 92.7 | 93.9 | 94.9 | 93.1 | 96.5 | 98.3 | 101.4 | 100.0 | 96.0 | 90.5 | 141.9 |
| 20000 | 82.8 | 87.9 | 89.2 | 90.3 | 93.5 | 93.9 | 91.5 | 94.1 | 95.9 | 98.0 | 96.9 | 93.7 | 88.4 | 141.2 |
| 25000 | 81.8 | 84.7 | 87.0 | 87.1 | 90.7 | 91.6 | 89.4 | 89.9 | 93.3 | 93.8 | 93.4 | 90.1 | 86.7 | 140.4 |
| 31500 | 79.9 | 81.0 | 84.7 | 86.6 | 85.9 | 86.9 | 86.1 | 86.9 | 90.5 | 92.4 | 90.4 | 85.1 | 81.9 | 140.6 |
| 40000 | 75.4 | 76.5 | 79.4 | 80.6 | 84.4 | 85.3 | 81.7 | 82.4 | 85.4 | 86.6 | 84.6 | 79.5 | 77.6 | 140.2 |
| 50000 | 68.5 | 69.3 | 72.3 | 74.7 | 76.9 | 78.4 | 76.6 | 76.1 | 81.1 | 79.6 | 78.4 | 74.6 | 72.0 | 138.4 |
| 63000 | 62.7 | 63.4 | 66.3 | 67.9 | 68.7 | 69.9 | 71.4 | 69.5 | 75.4 | 72.7 | 71.4 | 68.4 | 65.9 | 137.1 |
| 80000 | 56.4 | 56.0 | 59.5 | 62.7 | 61.9 | 64.1 | 63.1 | 63.6 | 68.7 | 66.8 | 65.9 | 59.6 | 57.3 | 137.4 |

GASPL 100.5 101.7 102.6 102.9 105.0 106.3 107.3 110.8 114.2 119.3 120.9 117.6 111.3 156.6

TEST DATE 03-16-78 TAPE NO. N300 ALPHA SB59 TAMB 40.28
 LOCATION C41 ANECH CH AERO. RDG. ADH147 PAMB 29.5250 RELHUM 21.80

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 110.1 SQ CM (17.07 SQ IN) - MODEL 90.83 M/SEC (298.0 FPS)
 6 3016

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07/19/79 18.286

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. /ARC

IDENTIFICATION - FJ-300-FMODL X30160

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 83.6 | 85.8 | 84.5 | 84.4 | 83.8 | 84.8 | 85.5 | 85.6 | 90.5 | 97.1 | 100.8 | 104.5 | 103.0 | 137.5 |
| 315 | 83.6 | 85.8 | 84.5 | 84.9 | 85.3 | 87.0 | 86.0 | 87.0 | 93.7 | 102.7 | 105.9 | 107.6 | 104.4 | 141.2 |
| 400 | 85.2 | 85.3 | 85.4 | 86.1 | 86.4 | 87.3 | 87.4 | 88.9 | 95.0 | 104.3 | 107.7 | 108.3 | 103.2 | 142.2 |
| 500 | 86.9 | 87.6 | 87.2 | 87.8 | 89.3 | 88.5 | 88.8 | 89.9 | 96.6 | 105.1 | 109.1 | 108.1 | 100.9 | 142.8 |
| 630 | 88.3 | 88.4 | 89.6 | 89.6 | 99.1 | 90.1 | 90.4 | 92.1 | 98.6 | 106.6 | 109.9 | 107.9 | 99.9 | 143.8 |
| 800 | 90.4 | 90.9 | 91.1 | 90.3 | 90.3 | 91.5 | 91.7 | 93.9 | 100.5 | 106.7 | 109.4 | 106.3 | 100.5 | 143.3 |
| 1000 | 91.0 | 89.4 | 90.4 | 90.7 | 91.4 | 92.9 | 92.9 | 95.3 | 100.9 | 106.7 | 109.6 | 105.6 | 99.4 | 143.4 |
| 1250 | 92.8 | 91.0 | 92.5 | 92.9 | 93.1 | 94.4 | 94.1 | 96.5 | 101.9 | 106.2 | 108.9 | 104.2 | 99.3 | 143.1 |
| 1600 | 91.7 | 92.9 | 93.2 | 92.6 | 94.1 | 94.9 | 97.5 | 102.5 | 107.5 | 107.4 | 103.1 | 98.8 | 143.0 | |
| 2000 | 92.8 | 91.3 | 92.4 | 91.8 | 92.6 | 94.1 | 95.1 | 97.8 | 102.9 | 107.4 | 107.6 | 103.3 | 99.2 | 143.1 |
| 2500 | 92.2 | 92.2 | 92.8 | 93.1 | 93.4 | 94.8 | 95.8 | 98.2 | 103.5 | 106.8 | 107.5 | 103.2 | 99.4 | 143.1 |
| 3150 | 91.9 | 92.9 | 93.1 | 93.4 | 93.7 | 95.3 | 96.6 | 99.5 | 103.0 | 106.4 | 106.8 | 102.2 | 98.7 | 142.8 |
| 4000 | 92.4 | 93.3 | 93.0 | 93.2 | 93.8 | 95.7 | 96.8 | 99.2 | 102.9 | 107.0 | 106.2 | 102.1 | 98.6 | 143.0 |
| 5000 | 93.0 | 92.7 | 93.4 | 93.5 | 94.2 | 96.2 | 97.0 | 100.5 | 103.7 | 106.5 | 106.3 | 102.4 | 100.3 | 143.3 |
| 6300 | 93.5 | 93.1 | 93.4 | 94.6 | 94.6 | 97.2 | 96.8 | 100.3 | 103.9 | 105.9 | 106.1 | 102.8 | 101.0 | 143.5 |
| 8000 | 95.4 | 94.5 | 94.4 | 94.4 | 94.4 | 97.3 | 97.8 | 99.6 | 102.6 | 106.4 | 103.6 | 103.3 | 101.9 | 143.8 |
| 10000 | 96.4 | 96.4 | 95.2 | 96.4 | 96.0 | 97.6 | 97.1 | 99.6 | 101.9 | 104.8 | 104.3 | 102.5 | 101.8 | 143.7 |
| 12500 | 96.0 | 97.3 | 97.1 | 96.9 | 97.3 | 97.1 | 95.9 | 98.3 | 101.1 | 104.0 | 102.9 | 101.4 | 101.5 | 144.0 |
| 16000 | 94.0 | 96.3 | 95.8 | 96.9 | 97.5 | 97.9 | 95.1 | 97.4 | 99.5 | 101.5 | 100.8 | 100.1 | 100.4 | 144.1 |
| 20000 | 91.4 | 94.6 | 95.4 | 95.3 | 97.6 | 96.9 | 93.9 | 95.5 | 98.3 | 98.7 | 97.8 | 99.7 | 144.3 | |
| 25000 | 88.0 | 92.4 | 92.8 | 92.1 | 94.7 | 94.6 | 91.9 | 91.8 | 95.4 | 97.0 | 95.4 | 92.7 | 95.1 | 143.8 |
| 31500 | 86.3 | 88.5 | 89.9 | 90.8 | 89.5 | 89.9 | 88.4 | 88.1 | 92.0 | 93.0 | 91.5 | 89.1 | 92.5 | 143.3 |
| 40000 | 81.5 | 82.3 | 85.5 | 85.7 | 88.4 | 88.3 | 84.2 | 84.3 | 88.1 | 86.5 | 85.8 | 84.5 | 87.3 | 143.3 |
| 50000 | 78.6 | 79.0 | 81.1 | 79.8 | 81.0 | 81.4 | 79.2 | 78.0 | 83.4 | 80.6 | 79.7 | 79.2 | 82.2 | 142.0 |
| 63000 | 70.7 | 70.9 | 73.0 | 72.1 | 72.3 | 72.9 | 74.0 | 71.5 | 77.5 | 75.3 | 74.9 | 71.1 | 74.7 | 140.4 |
| 80000 | 61.5 | 61.8 | 64.2 | 67.8 | 65.9 | 67.1 | 65.5 | 65.1 | 67.7 | 65.5 | 65.1 | 61.3 | 64.9 | 139.2 |
| OASPL | 105.5 | 106.1 | 106.3 | 106.6 | 107.7 | 108.2 | 107.9 | 110.3 | 114.4 | 118.6 | 120.0 | 117.7 | 114.0 | 157.1 |

| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 298.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 03-16-78 | TAPE NO. | N300 | TALPHA | SB59 | TAPB | 40.28 |
|-----------|--------------|------------|--------|--------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH147 | PAMB | 29.5250 | RELHUM | 21.80 |

| MODEL | TEST POINT | ACUSTIC RANGE | 12.2 M (40.0 FT) ARC | 110.1 SQ CM (17.07 SQ IN) - MODEL | SIZE | FREE-JET SPEED |
|-------|------------|---------------|-----------------------|------------------------------------|--------------------------|----------------|
| 6 | 3016 | | | | 90.83 M/SEC (298.0 FPS) | |

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07/19/79 18.286

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X30165

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 66.6 | 68.8 | 69.5 | 70.9 | 72.7 | 72.0 | 72.3 | 72.9 | 76.9 | 86.3 | 88.8 | 85.6 | 75.0 | 161.9 |
| 63 | 66.0 | 69.7 | 71.8 | 72.6 | 82.5 | 73.7 | 73.8 | 75.1 | 80.9 | 87.8 | 89.6 | 85.3 | 74.0 | 162.9 |
| 80 | 70.0 | 72.1 | 73.3 | 73.3 | 73.6 | 75.0 | 75.1 | 76.8 | 82.7 | 87.9 | 89.1 | 83.7 | 74.5 | 162.5 |
| 100 | 70.5 | 70.5 | 72.6 | 73.6 | 74.8 | 76.4 | 76.2 | 78.2 | 83.1 | 87.8 | 89.1 | 82.9 | 73.3 | 162.5 |
| 125 | 72.2 | 72.0 | 74.6 | 75.7 | 76.4 | 77.8 | 77.4 | 79.3 | 84.1 | 87.2 | 88.4 | 81.3 | 72.9 | 162.2 |
| 160 | 70.9 | 73.7 | 75.2 | 75.4 | 75.8 | 77.4 | 78.0 | 80.2 | 84.5 | 88.3 | 86.6 | 80.0 | 72.0 | 162.1 |
| 200 | 71.8 | 72.0 | 74.2 | 74.4 | 75.6 | 77.3 | 78.1 | 80.3 | 84.7 | 88.1 | 86.6 | 79.8 | 72.0 | 162.3 |
| 250 | 70.9 | 72.6 | 74.4 | 75.3 | 76.3 | 77.7 | 78.6 | 80.5 | 85.1 | 87.2 | 86.2 | 79.4 | 71.6 | 162.3 |
| 315 | 70.2 | 73.0 | 74.4 | 75.5 | 76.3 | 78.0 | 79.2 | 81.6 | 84.4 | 86.5 | 85.1 | 77.9 | 70.1 | 162.0 |
| 400 | 70.3 | 73.0 | 74.0 | 75.0 | 76.1 | 78.2 | 79.1 | 81.0 | 83.9 | 86.8 | 84.0 | 77.2 | 69.0 | 162.1 |
| 500 | 70.4 | 72.0 | 74.1 | 75.1 | 76.3 | 78.5 | 79.1 | 82.1 | 84.4 | 85.9 | 83.7 | 76.9 | 69.7 | 162.4 |
| 630 | 70.5 | 72.1 | 73.8 | 75.0 | 76.5 | 79.2 | 78.7 | 81.7 | 84.3 | 85.0 | 83.1 | 76.7 | 69.5 | 162.6 |
| 800 | 72.0 | 73.4 | 74.8 | 75.7 | 77.2 | 79.2 | 79.6 | 80.8 | 82.9 | 85.2 | 82.2 | 76.6 | 69.4 | 163.0 |
| 1000 | 72.8 | 75.1 | 75.5 | 77.6 | 79.6 | 79.6 | 78.9 | 80.9 | 82.2 | 83.5 | 80.7 | 75.3 | 68.4 | 162.9 |
| 1250 | 72.1 | 75.9 | 77.4 | 78.3 | 79.3 | 79.3 | 77.9 | 79.6 | 81.4 | 82.6 | 79.3 | 73.7 | 66.9 | 163.1 |
| 1600 | 69.8 | 74.9 | 76.2 | 78.5 | 79.7 | 80.3 | 77.4 | 79.0 | 79.9 | 80.1 | 76.5 | 71.5 | 63.9 | 163.2 |
| 2000 | 66.6 | 73.0 | 75.9 | 77.1 | 80.0 | 79.6 | 76.3 | 77.2 | 78.8 | 77.1 | 73.9 | 68.0 | 60.8 | 163.5 |
| 2500 | 62.1 | 70.2 | 73.0 | 73.6 | 77.2 | 77.3 | 74.4 | 73.4 | 75.6 | 74.7 | 69.5 | 60.7 | 51.8 | 162.9 |
| 3150 | 57.8 | 64.6 | 68.9 | 71.7 | 71.4 | 72.1 | 70.3 | 69.0 | 71.0 | 69.2 | 62.9 | 52.9 | 41.5 | 162.5 |
| 4000 | 47.6 | 54.5 | 61.6 | 64.2 | 68.2 | 68.5 | 64.0 | 62.8 | 64.2 | 58.8 | 51.9 | 40.2 | 22.7 | 162.4 |
| 5000 | 35.3 | 44.0 | 51.3 | 53.2 | 56.1 | 57.1 | 54.3 | 51.4 | 53.7 | 45.6 | 36.5 | 21.6 | | 161.1 |
| 6300 | 10.6 | 22.7 | 32.1 | 35.7 | 38.4 | 39.7 | 40.0 | 35.1 | 36.7 | 27.1 | 14.7 | | | 159.5 |
| 8000 | | | 3.5 | 13.6 | 15.3 | 17.5 | 14.9 | 10.9 | 7.0 | | | | | 158.3 |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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OASPL 83.0 85.4 87.1 88.3 91.2 90.6 90.5 92.2 95.5 98.6 98.3 92.7 83.7 175.9

PNL 89.8 93.9 96.4 97.8 99.9 100.3 99.5 99.7 102.1 103.4 101.3 94.7 86.2

PNLT 91.2 95.1 96.9 97.8 99.9 100.3 99.1 99.7 102.8 103.4 101.3 94.7 86.2

DIAMETER RATIO 9.056 FREQUENCY SHIFT -10

TEST DATE 03-16-78 TAPE NO. N300 ALPHA SB59 TAMB 40.28
LOCATION C41 ANECH CH AERO. RDG. ADH147 PAMB 29.5250 RELNUM 21.80

MODEL TEST POINT 3016 ACOUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 90.83 M/SEC (298.0 FPS) FREE-JET SPEED

07/19/79 18.286

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT., ARC

IDENTIFICATION - MODEL FJ-400-FMODL X30170
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

99.8

101.1

102.0

102.3

105.3

105.6

106.5

110.0

113.5

118.5

119.6

115.2

109.5

155.5

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TEST DATE 03-16-78

LOCATION C41 ANECH CH

TAPE NO. N300

AERO. RDG. ADH148

IALP:IA

PAMB

SB59

RELHUM

TAMB

40.26

21.80

MODEL TEST POINT

3017

ACQUSTIC RANGE

12.2 M (40.0 FT) ARC

SIZE

110.1 SQ CM (17.07 SQ IN) - MODEL

FREE-JET SPEED

118.57 M/SEC (389.0 FPS)

07/19/79 18.286

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X30170

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 84.8 | 85.3 | 84.5 | 84.2 | 83.5 | 83.8 | 83.5 | 83.6 | 89.0 | 95.5 | 98.9 | 102.3 | 100.7 | 135.5 |
| 315 | 84.8 | 85.3 | 84.5 | 84.2 | 85.0 | 85.4 | 84.9 | 84.9 | 91.9 | 101.1 | 104.9 | 105.7 | 102.2 | 139.6 |
| 400 | 85.9 | 86.8 | 85.8 | 84.7 | 85.5 | 85.5 | 85.3 | 87.2 | 92.8 | 102.9 | 106.4 | 105.7 | 99.8 | 140.4 |
| 500 | 87.3 | 87.7 | 87.3 | 85.4 | 91.5 | 87.7 | 87.2 | 88.2 | 95.4 | 103.7 | 107.5 | 105.0 | 99.4 | 141.0 |
| 630 | 88.5 | 88.6 | 89.0 | 87.3 | 102.7 | 88.9 | 88.6 | 90.5 | 97.3 | 104.7 | 108.7 | 104.5 | 100.5 | 142.6 |
| 800 | 92.6 | 91.9 | 92.3 | 89.3 | 89.5 | 90.1 | 90.0 | 92.4 | 99.3 | 106.1 | 108.2 | 103.4 | 101.8 | 142.2 |
| 1000 | 91.7 | 90.1 | 90.3 | 89.8 | 90.2 | 91.6 | 91.5 | 93.7 | 100.1 | 105.6 | 107.9 | 102.3 | 101.2 | 141.9 |
| 1250 | 92.9 | 91.1 | 92.6 | 90.2 | 92.0 | 93.1 | 93.1 | 94.9 | 100.8 | 106.0 | 107.5 | 102.2 | 101.7 | 142.2 |
| 1600 | 92.8 | 93.4 | 94.4 | 92.3 | 92.0 | 93.8 | 94.0 | 95.8 | 102.4 | 106.4 | 106.1 | 101.5 | 101.7 | 142.2 |
| 2000 | 93.4 | 91.9 | 92.4 | 92.1 | 91.9 | 93.1 | 94.1 | 96.7 | 101.9 | 107.2 | 106.3 | 101.4 | 101.6 | 142.4 |
| 2500 | 93.1 | 92.8 | 92.9 | 91.8 | 92.8 | 94.4 | 95.1 | 97.2 | 103.6 | 106.7 | 106.1 | 102.5 | 102.4 | 142.7 |
| 3150 | 93.0 | 93.3 | 93.4 | 92.7 | 93.9 | 95.6 | 96.3 | 98.8 | 103.1 | 106.0 | 106.6 | 101.7 | 102.4 | 142.8 |
| 4000 | 93.3 | 92.9 | 93.4 | 93.5 | 93.7 | 95.7 | 96.5 | 99.2 | 103.1 | 106.6 | 105.2 | 100.3 | 100.7 | 142.6 |
| 5000 | 93.6 | 92.9 | 93.7 | 93.6 | 94.3 | 96.2 | 97.3 | 99.8 | 102.9 | 105.8 | 104.3 | 100.5 | 101.8 | 142.5 |
| 6300 | 94.4 | 93.8 | 94.0 | 94.0 | 95.0 | 97.1 | 96.3 | 99.4 | 103.3 | 105.1 | 104.3 | 100.7 | 102.5 | 142.7 |
| 8000 | 96.0 | 95.7 | 95.1 | 94.4 | 95.3 | 96.6 | 96.5 | 98.7 | 102.5 | 105.2 | 103.9 | 102.5 | 103.9 | 143.2 |
| 10000 | 96.7 | 97.6 | 96.0 | 94.7 | 96.6 | 97.6 | 96.1 | 98.9 | 102.0 | 104.2 | 103.3 | 102.8 | 104.5 | 143.6 |
| 12500 | 97.2 | 98.5 | 98.5 | 96.8 | 98.0 | 96.9 | 96.0 | 98.0 | 101.8 | 104.0 | 102.6 | 102.7 | 104.6 | 144.5 |
| 16000 | 96.1 | 97.3 | 96.4 | 96.1 | 97.9 | 98.1 | 95.7 | 97.7 | 100.2 | 101.3 | 99.6 | 99.6 | 102.2 | 144.3 |
| 20000 | 93.5 | 95.3 | 96.1 | 95.7 | 97.6 | 97.1 | 94.0 | 95.6 | 96.6 | 95.9 | 94.2 | 96.3 | 99.9 | 143.7 |
| 25000 | 90.3 | 94.5 | 93.9 | 94.0 | 95.2 | 94.3 | 90.6 | 89.4 | 96.6 | 97.4 | 94.6 | 93.5 | 97.9 | 144.4 |
| 31500 | 88.8 | 90.0 | 90.7 | 89.5 | 90.1 | 89.4 | 88.3 | 89.0 | 92.2 | 91.4 | 89.5 | 87.3 | 92.8 | 143.2 |
| 40000 | 84.1 | 83.3 | 86.2 | 87.4 | 89.2 | 87.8 | 83.7 | 84.3 | 86.8 | 84.6 | 82.9 | 82.5 | 86.8 | 143.1 |
| 50000 | 81.2 | 80.5 | 82.1 | 82.3 | 81.0 | 81.2 | 78.9 | 77.1 | 81.9 | 77.4 | 76.4 | 76.8 | 81.6 | 141.9 |
| 63000 | 73.6 | 73.0 | 74.1 | 75.3 | 72.5 | 72.9 | 72.1 | 69.8 | 78.8 | 74.4 | 73.9 | 71.3 | 77.1 | 141.0 |
| 80000 | 63.6 | 62.8 | 64.6 | 66.3 | 66.2 | 66.8 | 65.3 | 65.0 | 68.9 | 64.6 | 64.1 | 61.5 | 67.3 | 139.3 |
| OASPL | 106.6 | 107.0 | 106.9 | 106.1 | 108.5 | 107.9 | 107.3 | 109.6 | 114.0 | 117.9 | 118.7 | 115.7 | 115.1 | 156.6 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | 389.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | ACUSTIC RANGE | TAPE NO. | N300 | TALPHA | 3859 | TANB | 40.28 |
|---|--|---|---|--------|---|--------|-------|
| LOCATION C41 ANECH CH <td>12.2 M (40.0 FT) ARC <td>AERO. RDG. <td>ADH148 <td>PAMB</td> <td>29.3250 <td>RELHUM</td> <td>21.80 </td></td></td></td></td> | 12.2 M (40.0 FT) ARC <td>AERO. RDG. <td>ADH148 <td>PAMB</td> <td>29.3250 <td>RELHUM</td> <td>21.80 </td></td></td></td> | AERO. RDG. <td>ADH148 <td>PAMB</td> <td>29.3250 <td>RELHUM</td> <td>21.80 </td></td></td> | ADH148 <td>PAMB</td> <td>29.3250 <td>RELHUM</td> <td>21.80 </td></td> | PAMB | 29.3250 <td>RELHUM</td> <td>21.80 </td> | RELHUM | 21.80 |

| MODEL | TEST POINT | ACUSTIC RANGE | FREE JET SPEED |
|-------|------------|-----------------------|---------------------------|
| 6 | 3017 | 12.2 M (40.0 FT) ARC | 110.57 M/SEC (389.0 FPS) |

07/19/79 18.286

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X30175

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 67.0 | 68.9 | 69.6 | 68.4 | 74.9 | 71.3 | 70.6 | 71.2 | 77.7 | 85.0 | 87.2 | 82.5 | 73.6 | 160.2 |
| 63 | 68.2 | 69.8 | 71.3 | 70.3 | 86.1 | 72.5 | 72.0 | 73.6 | 79.6 | 85.9 | 88.4 | 82.0 | 74.7 | 161.8 |
| 80 | 72.3 | 73.1 | 74.6 | 72.3 | 72.8 | 73.6 | 73.4 | 75.4 | 81.6 | 87.2 | 87.8 | 80.8 | 75.8 | 161.4 |
| 100 | 71.3 | 71.2 | 72.5 | 72.8 | 73.5 | 75.1 | 74.9 | 76.6 | 82.3 | 86.7 | 87.5 | 79.6 | 75.1 | 161.1 |
| 125 | 72.3 | 72.1 | 74.7 | 73.1 | 75.2 | 76.5 | 76.3 | 77.8 | 82.9 | 87.1 | 86.9 | 79.3 | 75.3 | 161.3 |
| 160 | 72.0 | 74.3 | 76.4 | 75.0 | 75.2 | 77.1 | 77.1 | 78.6 | 84.4 | 87.3 | 85.3 | 78.4 | 75.0 | 161.3 |
| 200 | 72.4 | 72.5 | 74.2 | 74.7 | 74.9 | 76.3 | 77.1 | 79.3 | 83.7 | 87.9 | 85.3 | 78.0 | 74.3 | 161.6 |
| 250 | 71.8 | 73.2 | 74.5 | 74.2 | 75.6 | 77.3 | 77.9 | 79.6 | 85.2 | 87.1 | 84.8 | 78.7 | 74.5 | 161.8 |
| 315 | 71.3 | 73.4 | 74.7 | 74.6 | 76.5 | 78.3 | 78.9 | 80.9 | 84.4 | 86.1 | 84.9 | 77.3 | 73.8 | 161.9 |
| 400 | 71.1 | 72.6 | 74.4 | 75.3 | 76.0 | 78.2 | 78.8 | 81.1 | 84.1 | 86.3 | 83.1 | 75.4 | 71.1 | 161.7 |
| 500 | 71.0 | 72.2 | 74.4 | 75.2 | 76.4 | 78.4 | 79.4 | 81.4 | 83.7 | 85.2 | 81.7 | 74.9 | 71.3 | 161.6 |
| 630 | 71.4 | 72.9 | 74.5 | 75.4 | 76.9 | 79.2 | 78.2 | 80.8 | 83.8 | 84.1 | 81.3 | 74.6 | 71.1 | 161.8 |
| 800 | 72.6 | 74.6 | 75.4 | 75.7 | 77.1 | 78.5 | 78.3 | 80.0 | 82.8 | 84.0 | 80.6 | 75.8 | 71.4 | 162.3 |
| 1000 | 73.1 | 76.4 | 76.3 | 75.9 | 78.4 | 79.6 | 77.9 | 80.2 | 82.2 | 82.9 | 79.6 | 75.6 | 71.1 | 162.8 |
| 1250 | 73.4 | 77.1 | 78.8 | 78.1 | 79.9 | 79.0 | 77.9 | 79.3 | 82.1 | 82.7 | 78.8 | 75.0 | 69.9 | 163.7 |
| 1600 | 71.9 | 75.9 | 76.8 | 77.6 | 80.1 | 80.5 | 79.3 | 80.6 | 79.9 | 75.4 | 71.0 | 65.8 | 163.4 | |
| 2000 | 68.7 | 73.7 | 76.5 | 77.4 | 80.0 | 79.8 | 76.4 | 77.4 | 77.0 | 74.2 | 69.4 | 65.5 | 60.8 | 162.8 |
| 2500 | 64.4 | 72.3 | 74.1 | 75.7 | 77.7 | 77.1 | 73.1 | 71.1 | 76.7 | 75.1 | 68.6 | 61.5 | 54.5 | 163.5 |
| 3150 | 60.3 | 66.2 | 69.7 | 70.4 | 72.0 | 71.6 | 70.2 | 69.9 | 71.3 | 67.6 | 61.0 | 51.1 | 41.9 | 162.3 |
| 4000 | 50.2 | 55.5 | 62.2 | 65.8 | 68.9 | 68.0 | 63.4 | 62.8 | 62.9 | 56.8 | 48.8 | 38.2 | 22.2 | 162.3 |
| 5000 | 37.9 | 45.6 | 52.4 | 55.8 | 56.1 | 55.9 | 54.1 | 50.5 | 52.1 | 42.5 | 33.1 | 19.2 | | 161.0 |
| 6300 | 13.4 | 24.8 | 33.2 | 38.8 | 38.5 | 39.7 | 38.2 | 33.4 | 37.9 | 26.2 | 13.8 | | | 160.2 |
| 8000 | | | 3.9 | 12.1 | 15.6 | 17.3 | 14.7 | 10.8 | 8.2 | | | | | 156.4 |

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GASPL 83.9 86.2 87.7 87.8 91.1 90.4 89.7 91.4 95.1 97.8 97.0 90.5 85.4 175.5
 PNLT 91.3 94.9 97.1 97.8 100.1 100.2 98.2 99.2 101.9 102.7 100.1 93.4 88.5
 PNLT 92.7 96.2 98.1 98.4 101.2 100.2 98.2 99.2 102.8 104.1 100.1 93.4 88.5

DIAMETER RATIO 9.056 FREQUENCY SHIFT -10

TEST DATE 03-16-78 TAPE NO. N300 ALPHA SB59 TAMB 40.28
 LOCATION C41 ANECH CH AERO. RDG. ADH148 PAMB 29.5230 RELHUM 21.80

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
 6 3017 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 118.57 M/SEC (389.0 FPS)

07/19/79 16.266

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X30180
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50
63
80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

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TEST DATE 03-16-78 TAPE NO. N300 ALPHA SB59 TAMB 39.92
LOCATION C41 ATECH CH AERO. RDG. ADH140 PAMB 29.5000 RELHUM 22.40

MODEL TEST POINT 3018 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 110.1 SQ CH (17.07 SQ IN) - MODEL SIZE FREE-JET SPEED
6 0. M/SEC (0. FPS)

07/19/79 15.286

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X30180

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 81.5 | 86.1 | 85.8 | 86.1 | 86.7 | 89.1 | 91.2 | 92.9 | 95.3 | 101.9 | 107.0 | 110.0 | 109.4 | 143.2 |
| 315 | 82.6 | 86.7 | 86.2 | 87.0 | 88.8 | 90.9 | 91.8 | 93.7 | 97.1 | 104.5 | 108.6 | 111.6 | 110.5 | 144.7 |
| 400 | 84.9 | 86.4 | 87.5 | 87.3 | 88.6 | 91.0 | 92.6 | 94.5 | 99.5 | 108.5 | 111.4 | 113.3 | 110.8 | 146.8 |
| 500 | 85.5 | 87.8 | 89.0 | 89.1 | 92.4 | 92.3 | 93.7 | 96.1 | 100.8 | 109.9 | 114.2 | 114.2 | 111.6 | 148.5 |
| 630 | 87.1 | 89.4 | 90.9 | 89.9 | 102.0 | 94.2 | 95.0 | 97.7 | 102.7 | 111.0 | 115.4 | 115.3 | 112.4 | 149.7 |
| 800 | 90.9 | 89.2 | 91.4 | 92.2 | 93.1 | 94.9 | 96.6 | 99.7 | 104.2 | 111.8 | 115.9 | 115.6 | 113.2 | 150.2 |
| 1000 | 96.7 | 96.5 | 96.8 | 95.3 | 94.4 | 96.8 | 97.9 | 100.8 | 105.3 | 111.4 | 115.0 | 115.7 | 113.6 | 150.0 |
| 1250 | 92.1 | 94.4 | 95.7 | 96.0 | 97.0 | 99.4 | 99.3 | 101.7 | 105.7 | 111.3 | 115.9 | 115.8 | 112.7 | 150.3 |
| 1600 | 94.0 | 93.1 | 93.6 | 93.9 | 95.7 | 98.1 | 99.7 | 102.1 | 106.1 | 110.7 | 114.9 | 115.6 | 112.6 | 149.9 |
| 2000 | 96.2 | 97.0 | 96.5 | 95.2 | 95.3 | 97.2 | 98.8 | 102.2 | 106.5 | 111.1 | 114.5 | 114.0 | 110.2 | 149.2 |
| 2500 | 93.9 | 93.9 | 95.4 | 95.4 | 96.3 | 97.9 | 99.8 | 102.9 | 106.2 | 111.6 | 114.2 | 112.4 | 108.2 | 148.8 |
| 3150 | 95.4 | 96.3 | 95.3 | 95.5 | 95.8 | 98.4 | 100.1 | 103.5 | 106.5 | 110.2 | 113.6 | 111.2 | 107.3 | 148.2 |
| 4000 | 94.3 | 94.1 | 94.2 | 94.1 | 95.4 | 97.8 | 99.4 | 103.4 | 106.2 | 109.1 | 112.2 | 109.8 | 105.6 | 147.2 |
| 5000 | 93.2 | 93.5 | 93.8 | 94.0 | 95.8 | 97.7 | 99.8 | 103.3 | 105.8 | 109.0 | 111.3 | 108.7 | 104.9 | 146.8 |
| 6300 | 91.9 | 93.8 | 94.6 | 94.3 | 95.3 | 98.4 | 99.4 | 102.3 | 104.7 | 108.5 | 109.5 | 107.5 | 105.0 | 146.0 |
| 8000 | 91.1 | 94.8 | 94.6 | 94.2 | 95.3 | 97.7 | 98.5 | 101.8 | 104.3 | 106.7 | 108.4 | 105.8 | 103.6 | 145.3 |
| 10000 | 89.5 | 94.9 | 95.3 | 95.1 | 95.5 | 98.1 | 97.8 | 101.1 | 102.8 | 105.5 | 107.3 | 105.1 | 102.3 | 144.9 |
| 12500 | 87.0 | 92.7 | 94.1 | 94.7 | 95.7 | 96.9 | 96.3 | 99.2 | 100.8 | 103.2 | 104.1 | 102.9 | 101.1 | 143.6 |
| 16000 | 85.3 | 91.3 | 92.9 | 94.0 | 95.7 | 96.9 | 95.1 | 98.0 | 98.5 | 101.4 | 102.8 | 100.8 | 98.5 | 143.5 |
| 20000 | 80.0 | 88.4 | 90.2 | 91.5 | 95.1 | 95.9 | 92.6 | 94.6 | 96.4 | 97.8 | 99.2 | 97.9 | 95.4 | 142.6 |
| 25000 | 79.1 | 84.7 | 87.5 | 88.1 | 92.7 | 93.1 | 90.1 | 90.6 | 93.4 | 93.6 | 94.1 | 93.2 | 91.6 | 141.6 |
| 31500 | 77.6 | 80.8 | 84.7 | 86.9 | 87.4 | 87.9 | 86.6 | 88.1 | 90.5 | 92.4 | 90.9 | 89.1 | 87.7 | 141.3 |
| 40000 | 73.2 | 76.0 | 79.7 | 81.2 | 85.7 | 86.1 | 82.2 | 83.0 | 85.7 | 86.9 | 86.1 | 84.2 | 84.1 | 141.1 |
| 50000 | 66.2 | 69.1 | 72.3 | 75.3 | 77.7 | 78.4 | 77.4 | 76.1 | 80.4 | 80.1 | 80.4 | 79.9 | 78.3 | 139.1 |
| 63000 | 61.0 | 63.1 | 66.0 | 69.4 | 70.0 | 70.2 | 70.9 | 69.6 | 75.4 | 73.7 | 74.1 | 73.6 | 72.7 | 138.1 |
| 80000 | 54.5 | 56.8 | 60.8 | 64.0 | 62.9 | 64.6 | 64.1 | 64.1 | 69.8 | 67.0 | 69.4 | 66.9 | 65.3 | 138.9 |
| GASPL | 104.9 | 106.3 | 106.8 | 106.7 | 108.8 | 109.9 | 110.7 | 113.7 | 117.0 | 122.1 | 125.6 | 125.3 | 122.6 | 160.9 |

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000

FREE JET VELOCITY (FT/SEC) 0.

REFRACTION CORRECTION - YES

TURBULANCE CORRECTION - YES

TEST DATE 03-16-78
 LOCATION C41 ANECH CH
 TAPE NO. N300
 AERO. RDG. ADH140
 ALPHA SB59
 PAMB 29.5000
 TAMB 39.92
 RELHUM 22.40

MODEL TEST POINT 6 3018
 ACQUSTIC RANGE 12.2 M (40.0 FT) ARC
 SIZE 110.1 SQ CM (17.07 SQ IN) - MODEL 0.
 FREE-JET SPEED 0. M/SEC (0. FPS)

07/19/79 18.286

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X30185

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PUL |
|-------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 50 | 65.2 | 69.0 | 71.4 | 72.1 | 75.9 | 75.9 | 77.1 | 79.1 | 83.1 | 91.1 | 94.0 | 91.7 | 85.6 | 167.6 |
| 63 | 66.8 | 70.6 | 73.2 | 72.9 | 85.5 | 77.7 | 78.4 | 80.7 | 84.9 | 92.2 | 95.0 | 92.6 | 86.6 | 168.6 |
| 80 | 70.5 | 70.3 | 73.7 | 75.2 | 76.5 | 78.5 | 80.0 | 82.7 | 86.4 | 92.9 | 95.5 | 93.0 | 87.2 | 169.3 |
| 100 | 76.3 | 77.6 | 79.0 | 78.3 | 77.8 | 80.3 | 81.3 | 83.8 | 87.5 | 92.5 | 94.5 | 93.0 | 87.4 | 169.2 |
| 125 | 71.5 | 75.4 | 77.8 | 78.8 | 80.3 | 82.8 | 82.6 | 84.6 | 87.8 | 92.3 | 95.3 | 92.9 | 86.3 | 169.5 |
| 160 | 73.2 | 74.0 | 75.6 | 76.6 | 78.9 | 81.4 | 82.9 | 84.9 | 88.1 | 91.6 | 94.1 | 92.5 | 85.9 | 169.0 |
| 200 | 75.2 | 77.6 | 78.3 | 77.8 | 78.3 | 80.3 | 81.8 | 84.8 | 88.3 | 91.8 | 93.5 | 90.6 | 83.0 | 168.4 |
| 250 | 72.6 | 74.3 | 77.0 | 77.8 | 79.1 | 80.9 | 82.6 | 85.3 | 87.8 | 92.0 | 92.9 | 86.6 | 80.3 | 168.0 |
| 315 | 73.7 | 76.3 | 76.6 | 77.6 | 78.4 | 81.2 | 82.7 | 85.6 | 87.8 | 90.3 | 91.9 | 86.9 | 78.8 | 167.3 |
| 400 | 72.1 | 73.9 | 75.2 | 76.0 | 77.8 | 80.3 | 81.8 | 85.2 | 87.2 | 88.8 | 90.0 | 84.9 | 76.0 | 166.3 |
| 500 | 70.6 | 72.9 | 74.5 | 75.6 | 77.9 | 79.9 | 81.9 | 84.9 | 86.5 | 88.4 | 88.7 | 83.1 | 74.4 | 165.9 |
| 630 | 68.9 | 72.9 | 75.1 | 75.7 | 77.2 | 80.5 | 81.3 | 83.7 | 85.2 | 87.6 | 86.5 | 81.4 | 73.5 | 165.2 |
| 800 | 67.7 | 73.6 | 74.9 | 75.5 | 77.1 | 79.6 | 80.3 | 83.1 | 84.6 | 85.5 | 85.1 | 79.1 | 71.1 | 164.4 |
| 1000 | 65.9 | 73.6 | 75.6 | 76.4 | 77.3 | 80.1 | 79.6 | 82.3 | 83.1 | 84.2 | 83.7 | 77.9 | 68.8 | 164.1 |
| 1250 | 63.2 | 71.4 | 74.4 | 76.1 | 77.7 | 79.0 | 78.3 | 80.6 | 81.1 | 81.8 | 80.2 | 75.1 | 66.4 | 162.8 |
| 1600 | 61.1 | 69.9 | 73.3 | 75.5 | 77.9 | 79.3 | 77.3 | 79.5 | 78.9 | 80.0 | 78.6 | 72.2 | 62.0 | 162.7 |
| 2000 | 55.3 | 66.8 | 70.6 | 73.3 | 77.5 | 78.6 | 75.0 | 76.4 | 76.8 | 76.2 | 74.4 | 68.1 | 56.3 | 161.7 |
| 2500 | 53.2 | 62.5 | 67.7 | 69.7 | 75.2 | 75.6 | 72.6 | 72.3 | 73.5 | 71.4 | 68.7 | 62.1 | 49.8 | 160.7 |
| 3150 | 49.1 | 56.9 | 63.8 | 67.8 | 69.3 | 70.2 | 68.5 | 69.0 | 69.5 | 68.5 | 62.4 | 52.9 | 36.7 | 160.5 |
| 4000 | 39.2 | 48.2 | 55.8 | 59.6 | 65.4 | 66.3 | 62.0 | 61.4 | 61.8 | 59.1 | 52.2 | 39.9 | 19.5 | 160.2 |
| 5000 | 23.0 | 34.2 | 42.6 | 48.7 | 52.9 | 54.2 | 52.8 | 49.5 | 50.6 | 45.2 | 37.1 | 22.3 | 156.2 | |
| 6300 | 0.8 | 14.9 | 25.1 | 33.0 | 36.0 | 37.0 | 37.0 | 33.1 | 34.5 | 25.5 | 14.0 | 157.2 | 156.1 | |
| 10000 | | | 0.1 | 9.8 | 12.3 | 15.1 | 13.5 | 9.9 | 9.0 | | | | | |

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|-------|------|------|------|------|------|-------|------|-------|-------|-------|-------|-------|------|-------|
| OASPL | 83.4 | 86.2 | 89.0 | 88.7 | 91.4 | 92.5 | 93.1 | 95.7 | 98.3 | 102.3 | 104.3 | 101.5 | 95.1 | 179.7 |
| PNL | 87.0 | 91.4 | 94.4 | 96.1 | 99.1 | 100.5 | 99.3 | 101.5 | 103.3 | 105.8 | 106.4 | 102.5 | 94.9 | |
| PNLT | 87.6 | 92.2 | 94.9 | 96.1 | 99.1 | 100.5 | 99.3 | 101.5 | 103.3 | 105.8 | 106.4 | 102.5 | 94.9 | |

DIAMETER RATIO 9.056 FREQUENCY SHIFT -10

TEST DATE 03-16-76 TAPE NO. N300 IALPHA S359 TAMB 39.92
LOCATION C41 ANECH CH AERO. RDG. ADH140 PAMB 29.5000 RELHUM 22.40

MODEL TEST POINT 3018 ACQUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CH (1400.00 SQ IN) - FULL SIZE 0. FREE-JET SPEED 0. M/SEC (0. FPS)

07/19/79 18.286

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X30190
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 77.7 | 61.3 | 61.3 | 62.6 | 62.9 | 65.0 | 67.4 | 69.1 | 91.5 | 98.6 | 103.6 | 106.7 | 106.1 | 139.9 |
| 315 | 79.3 | 61.6 | 62.6 | 63.2 | 64.5 | 66.7 | 67.5 | 69.7 | 93.7 | 101.0 | 105.4 | 108.6 | 105.7 | 141.3 |
| 400 | 82.1 | 62.9 | 63.7 | 64.2 | 64.8 | 67.2 | 68.1 | 70.5 | 95.2 | 104.8 | 108.7 | 109.6 | 104.5 | 143.1 |
| 500 | 82.2 | 63.3 | 65.5 | 65.1 | 69.2 | 68.5 | 69.7 | 92.1 | 96.6 | 106.4 | 110.7 | 109.7 | 102.1 | 144.3 |
| 630 | 83.1 | 64.5 | 66.4 | 66.4 | 69.3 | 69.9 | 91.3 | 94.4 | 99.2 | 107.5 | 112.1 | 109.3 | 98.7 | 145.3 |
| 800 | 85.4 | 64.9 | 67.2 | 68.5 | 68.6 | 91.4 | 93.1 | 96.0 | 101.2 | 108.5 | 112.4 | 108.1 | 96.5 | 145.4 |
| 1000 | 87.7 | 66.5 | 68.8 | 68.8 | 69.7 | 92.5 | 94.2 | 97.3 | 102.3 | 103.9 | 112.0 | 106.7 | 94.8 | 145.3 |
| 1250 | 86.4 | 68.2 | 69.7 | 90.7 | 92.3 | 94.4 | 95.0 | 98.5 | 102.4 | 108.5 | 111.9 | 105.8 | 94.4 | 145.1 |
| 1600 | 88.0 | 66.6 | 69.1 | 69.6 | 91.7 | 94.3 | 95.5 | 99.9 | 103.4 | 108.2 | 111.4 | 104.1 | 94.6 | 144.8 |
| 2000 | 86.3 | 68.0 | 69.0 | 69.7 | 90.6 | 93.7 | 95.1 | 99.2 | 104.2 | 108.8 | 109.8 | 103.5 | 94.0 | 144.4 |
| 2500 | 87.1 | 67.7 | 69.9 | 90.7 | 91.5 | 93.9 | 96.5 | 99.7 | 103.9 | 108.6 | 109.7 | 103.2 | 93.7 | 144.3 |
| 3150 | 87.7 | 68.5 | 69.3 | 90.8 | 91.8 | 94.4 | 96.6 | 100.5 | 104.5 | 107.4 | 108.6 | 102.2 | 93.5 | 143.7 |
| 4000 | 88.3 | 67.6 | 69.9 | 69.6 | 90.7 | 94.1 | 95.4 | 99.9 | 103.7 | 106.6 | 107.7 | 100.6 | 92.3 | 143.0 |
| 5000 | 89.0 | 69.6 | 69.6 | 90.8 | 92.1 | 94.2 | 96.6 | 100.5 | 103.6 | 107.0 | 107.1 | 100.7 | 91.5 | 143.2 |
| 6300 | 91.2 | 90.6 | 90.6 | 90.6 | 91.8 | 94.9 | 96.4 | 99.8 | 103.2 | 105.8 | 105.8 | 100.1 | 92.0 | 142.6 |
| 8000 | 92.3 | 92.5 | 92.4 | 91.7 | 92.3 | 94.4 | 96.0 | 99.6 | 102.8 | 105.5 | 105.0 | 99.6 | 92.4 | 142.6 |
| 10000 | 91.7 | 92.4 | 93.8 | 93.4 | 93.5 | 95.1 | 95.0 | 99.1 | 101.6 | 105.0 | 103.9 | 99.2 | 92.8 | 142.6 |
| 12500 | 89.1 | 91.7 | 92.1 | 93.0 | 93.5 | 94.6 | 94.1 | 97.5 | 99.8 | 102.4 | 101.6 | 97.4 | 91.3 | 141.5 |
| 15000 | 87.6 | 90.1 | 91.4 | 92.5 | 93.7 | 94.7 | 93.1 | 96.7 | 98.3 | 101.5 | 99.8 | 96.0 | 90.2 | 141.8 |
| 20000 | 83.3 | 88.4 | 88.5 | 90.6 | 92.8 | 93.4 | 90.8 | 93.7 | 95.2 | 98.8 | 96.7 | 93.2 | 88.4 | 141.2 |
| 25000 | 81.9 | 84.5 | 87.0 | 87.4 | 90.7 | 91.1 | 88.6 | 89.7 | 93.6 | 93.6 | 92.9 | 89.8 | 86.4 | 140.3 |
| 31500 | 80.2 | 81.0 | 84.5 | 87.1 | 86.4 | 86.9 | 85.9 | 87.4 | 91.1 | 92.1 | 89.9 | 84.4 | 82.0 | 140.7 |
| 40000 | 75.2 | 76.0 | 79.7 | 81.2 | 84.9 | 85.4 | 81.5 | 83.0 | 86.0 | 86.7 | 84.4 | 79.9 | 77.9 | 140.4 |
| 50000 | 69.8 | 69.6 | 72.1 | 75.5 | 76.7 | 78.0 | 76.9 | 76.4 | 81.1 | 79.9 | 78.2 | 74.6 | 72.0 | 138.4 |
| 63000 | 62.7 | 63.7 | 66.0 | 68.7 | 68.8 | 69.9 | 70.7 | 69.8 | 75.9 | 72.7 | 71.2 | 68.1 | 66.2 | 137.2 |
| 80000 | 57.2 | 56.6 | 60.1 | 63.5 | 61.4 | 64.4 | 62.9 | 63.6 | 69.0 | 66.0 | 65.7 | 60.1 | 58.6 | 137.5 |
| GASPL | 100.5 | 101.6 | 102.7 | 103.3 | 105.5 | 106.4 | 107.4 | 110.9 | 114.7 | 119.5 | 121.9 | 118.4 | 112.1 | 157.0 |

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TEST DATE 03-16-78
LOCATION C41 ANECH CH

TAPE NO. N300
AERO. RDG. ADH150

ALPHA SB59
PANS 29.5450

TAMS 40.28
RELHUM 22.30

MODEL TEST POINT
6 3019

ACOUSTIC RANGE
12.2 M (40.0 FT) ARC

SIZE
110.1 SQ CM (17.07 SQ IN) - MODEL

FREE-JET SPEED
91.74 M/SEC (301.0 FPS)

07/19/79 18.286

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X30190

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PHL

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PHL |
|-------|------|------|------|------|-------|------|------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 83.4 | 85.9 | 84.8 | 85.0 | 84.1 | 85.0 | 86.0 | 86.3 | 91.0 | 97.5 | 101.5 | 105.0 | 103.5 | 138.0 |
| 315 | 83.4 | 86.9 | 84.3 | 85.7 | 85.3 | 86.6 | 86.6 | 87.5 | 93.7 | 102.8 | 106.6 | 108.2 | 105.1 | 141.6 |
| 400 | 85.0 | 86.3 | 86.2 | 85.6 | 86.1 | 87.3 | 87.4 | 89.1 | 95.0 | 104.3 | 108.7 | 108.8 | 104.0 | 142.8 |
| 500 | 87.1 | 87.2 | 87.1 | 87.6 | 90.5 | 88.7 | 88.8 | 90.4 | 97.4 | 105.3 | 110.1 | 108.8 | 101.9 | 143.6 |
| 630 | 87.9 | 88.5 | 89.6 | 89.9 | 101.1 | 90.1 | 90.4 | 92.6 | 99.6 | 106.6 | 110.7 | 108.5 | 101.6 | 144.5 |
| 800 | 90.7 | 91.0 | 91.4 | 91.1 | 90.3 | 91.7 | 92.2 | 94.1 | 101.0 | 107.3 | 110.8 | 107.9 | 101.7 | 144.4 |
| 1000 | 91.0 | 89.7 | 90.9 | 91.4 | 91.2 | 92.9 | 93.4 | 95.6 | 101.2 | 107.0 | 110.7 | 107.1 | 101.3 | 144.2 |
| 1250 | 93.2 | 91.1 | 92.5 | 93.4 | 93.9 | 94.9 | 94.4 | 96.7 | 102.2 | 106.8 | 110.3 | 105.4 | 101.5 | 144.0 |
| 1600 | 92.0 | 92.9 | 93.5 | 92.4 | 93.4 | 94.9 | 94.9 | 97.3 | 103.2 | 107.5 | 108.7 | 104.8 | 100.7 | 143.7 |
| 2000 | 93.6 | 91.4 | 92.9 | 92.6 | 92.4 | 94.4 | 94.7 | 97.8 | 103.2 | 107.5 | 108.9 | 104.7 | 100.6 | 143.8 |
| 2500 | 92.5 | 92.8 | 92.8 | 93.7 | 93.5 | 94.8 | 96.3 | 98.4 | 104.1 | 106.6 | 108.1 | 104.1 | 100.8 | 143.5 |
| 3150 | 92.7 | 92.5 | 93.9 | 93.9 | 94.0 | 95.6 | 96.8 | 99.0 | 103.6 | 106.2 | 107.6 | 102.8 | 99.8 | 143.2 |
| 4000 | 93.2 | 93.3 | 93.2 | 93.0 | 93.1 | 95.5 | 96.8 | 99.2 | 103.9 | 107.1 | 107.5 | 103.4 | 99.5 | 143.6 |
| 5000 | 93.8 | 92.5 | 94.0 | 94.3 | 94.8 | 96.0 | 97.3 | 100.3 | 104.5 | 106.6 | 107.0 | 103.6 | 100.9 | 143.7 |
| 6300 | 94.1 | 93.9 | 93.7 | 94.4 | 94.9 | 97.2 | 97.6 | 100.1 | 104.4 | 106.6 | 106.4 | 103.4 | 101.6 | 143.9 |
| 8000 | 96.5 | 95.4 | 94.8 | 95.7 | 95.7 | 97.3 | 97.8 | 100.3 | 103.4 | 106.4 | 105.6 | 103.4 | 102.6 | 144.2 |
| 10000 | 96.6 | 96.7 | 96.3 | 97.6 | 97.1 | 98.1 | 96.9 | 99.9 | 101.9 | 104.3 | 103.8 | 102.1 | 101.7 | 143.7 |
| 12500 | 96.6 | 96.9 | 97.8 | 97.2 | 97.1 | 97.6 | 98.0 | 98.3 | 101.1 | 104.0 | 102.7 | 101.5 | 101.3 | 144.0 |
| 16000 | 93.3 | 95.7 | 95.6 | 96.7 | 97.3 | 97.7 | 95.2 | 97.7 | 99.6 | 102.1 | 100.4 | 99.4 | 100.3 | 144.0 |
| 20000 | 91.5 | 93.7 | 94.5 | 95.6 | 96.9 | 96.4 | 93.1 | 94.9 | 98.6 | 98.4 | 98.2 | 97.5 | 99.5 | 144.0 |
| 25000 | 88.6 | 93.0 | 92.2 | 92.4 | 94.7 | 94.1 | 91.2 | 91.5 | 96.0 | 96.8 | 95.1 | 92.1 | 95.4 | 143.7 |
| 31500 | 86.4 | 88.3 | 90.0 | 91.4 | 90.0 | 89.9 | 88.2 | 88.7 | 92.6 | 93.2 | 91.3 | 89.4 | 92.9 | 143.6 |
| 40000 | 81.8 | 82.4 | 85.3 | 86.3 | 89.0 | 88.4 | 84.0 | 84.9 | 88.1 | 86.8 | 85.5 | 84.5 | 87.4 | 143.4 |
| 50000 | 78.5 | 78.6 | 81.4 | 80.6 | 80.8 | 81.0 | 79.4 | 78.3 | 84.0 | 80.6 | 79.5 | 79.0 | 82.3 | 142.1 |
| 63000 | 71.1 | 71.2 | 72.8 | 72.9 | 72.4 | 72.9 | 73.3 | 71.8 | 78.2 | 75.0 | 75.2 | 72.2 | 76.3 | 140.7 |
| 80000 | 61.6 | 62.1 | 64.1 | 68.6 | 65.5 | 67.4 | 68.4 | 65.3 | 68.4 | 65.2 | 68.4 | 62.4 | 66.5 | 139.5 |

WASPL 106.0 106.1 106.5 107.0 108.2 108.3 108.0 110.4 114.9 118.8 120.9 118.5 114.8 157.5

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 301.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-16-78 TAPE NO. N300 ALPHA 3859 TAMB 40.28
LOCATION C41 ANECH CH AERO. RDG. ADH150 PAMB 29.5450 RELHUM 22.30

MODEL TEST POINT 3019 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 110.1 SQ CM (17.07 SQ IN) - MODEL 91.74 M/SEC (301.0 FPS) FREE-JET SPEED

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X30195

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 66.8 | 68.5 | 69.4 | 70.6 | 74.0 | 72.3 | 72.3 | 73.4 | 79.7 | 86.6 | 89.8 | 86.3 | 76.1 | 162.7 |
| 63 | 67.5 | 69.7 | 71.9 | 72.9 | 84.5 | 73.7 | 73.8 | 75.6 | 81.9 | 87.8 | 90.4 | 85.9 | 75.7 | 163.6 |
| 80 | 70.4 | 72.2 | 73.6 | 74.1 | 73.7 | 75.2 | 75.6 | 77.1 | 83.2 | 88.5 | 90.4 | 85.3 | 75.7 | 163.6 |
| 100 | 70.6 | 70.8 | 73.1 | 74.4 | 74.5 | 76.4 | 76.7 | 78.4 | 83.4 | 88.1 | 90.2 | 84.4 | 75.2 | 163.4 |
| 125 | 72.6 | 72.2 | 74.6 | 76.3 | 77.2 | 78.3 | 77.6 | 79.6 | 84.4 | 87.8 | 89.7 | 82.6 | 75.1 | 163.2 |
| 160 | 71.2 | 73.8 | 75.4 | 75.1 | 76.6 | 78.2 | 78.0 | 80.0 | 85.2 | 88.4 | 88.0 | 81.7 | 73.9 | 162.9 |
| 200 | 72.6 | 72.0 | 74.7 | 75.2 | 75.4 | 77.6 | 77.7 | 80.3 | 85.0 | 88.1 | 87.9 | 81.3 | 73.4 | 162.9 |
| 250 | 71.2 | 73.2 | 74.4 | 76.0 | 76.3 | 77.7 | 79.1 | 80.8 | 85.7 | 87.1 | 86.8 | 80.3 | 73.0 | 162.6 |
| 315 | 71.0 | 72.6 | 75.2 | 76.0 | 76.6 | 78.3 | 79.2 | 81.6 | 84.9 | 86.3 | 85.9 | 76.4 | 71.2 | 162.3 |
| 400 | 71.1 | 73.0 | 74.2 | 74.8 | 75.4 | 78.0 | 79.1 | 81.0 | 84.9 | 86.8 | 85.3 | 78.5 | 69.9 | 162.7 |
| 500 | 71.2 | 71.9 | 74.7 | 75.9 | 76.9 | 78.3 | 79.4 | 81.6 | 85.0 | 86.0 | 84.4 | 78.0 | 70.4 | 162.8 |
| 630 | 71.1 | 72.9 | 74.2 | 75.8 | 76.8 | 79.3 | 79.5 | 81.5 | 84.9 | 85.7 | 83.4 | 77.2 | 70.1 | 163.0 |
| 800 | 73.1 | 74.2 | 75.1 | 77.0 | 77.5 | 79.3 | 79.6 | 81.6 | 83.7 | 85.3 | 82.3 | 75.7 | 70.1 | 163.3 |
| 1000 | 73.0 | 75.4 | 76.5 | 78.9 | 78.9 | 80.1 | 78.7 | 81.1 | 82.2 | 83.0 | 80.2 | 74.3 | 68.2 | 162.9 |
| 1250 | 72.7 | 75.5 | 78.1 | 78.6 | 79.1 | 79.6 | 79.9 | 79.6 | 81.4 | 82.6 | 78.8 | 73.7 | 65.7 | 163.2 |
| 1600 | 69.2 | 74.2 | 76.0 | 78.3 | 79.5 | 80.1 | 77.4 | 79.3 | 80.0 | 80.6 | 76.2 | 70.9 | 63.9 | 163.1 |
| 2000 | 66.7 | 72.0 | 74.9 | 77.4 | 79.3 | 79.3 | 76.5 | 76.6 | 79.0 | 76.8 | 73.4 | 67.7 | 50.4 | 163.1 |
| 2500 | 62.7 | 70.6 | 72.3 | 74.1 | 77.2 | 76.8 | 73.7 | 73.2 | 76.2 | 74.6 | 69.1 | 60.1 | 52.0 | 162.9 |
| 3150 | 57.9 | 64.4 | 69.0 | 72.3 | 72.0 | 72.2 | 70.1 | 69.6 | 71.6 | 69.3 | 62.8 | 53.2 | 41.2 | 162.7 |
| 4000 | 47.9 | 54.6 | 61.4 | 64.7 | 68.7 | 68.6 | 63.8 | 63.3 | 64.2 | 59.0 | 51.6 | 40.2 | 22.7 | 162.6 |
| 5000 | 35.2 | 43.6 | 51.7 | 54.0 | 55.9 | 56.7 | 54.6 | 51.7 | 54.2 | 45.7 | 36.2 | 21.4 | | 161.2 |
| 6300 | 11.0 | 23.0 | 32.0 | 36.5 | 38.4 | 39.7 | 39.3 | 35.3 | 37.3 | 26.8 | 15.0 | | | 159.8 |
| 8000 | | | | | | | | | | | | | | 158.6 |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GASPL 83.5 85.4 87.3 88.7 90.7 90.7 90.3 92.3 96.0 96.7 99.3 93.8 85.0 176.3
 PNL 89.9 93.8 96.2 98.2 99.8 100.1 98.3 99.8 102.5 103.4 102.0 95.5 87.2
 PNL 91.1 94.9 97.3 98.2 100.9 100.1 95.8 99.8 103.2 103.4 102.0 95.5 87.2

DIAMETER RATIO 9.056 FREQUENCY SHIFT -10

TEST DATE 03-16-78 TAPE NO. N300 IALPHA SB59 TAMB 40.28
 LOCATION C41 ANECH CH AERO. RDG. ADH150 PAMB 29.5456 RELHUM 22.30

MODEL TEST POINT ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE FREE-JET SPEED
 6 3019 91.74 M/SEC (301.0 FPS)

07/19/79 10.286

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X30200
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

10000000

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OF FOUR QUALITYTEST DATE 03-16-78 TAPE NO. N300 ALPHA SB59 TAMB 40.28
LOCATION C41 ANECH CH AERO. RDG. ADH149 PAMB 29.5450 RELHUM 22.30

MODEL TEST POINT 3020 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 110.1 SQ CM (17.07 SQ IN) - MODEL 118 37 M/SEC (389.0 FPS) FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X71120

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

10000000

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MODEL/FULL SIZE SCALE FACTOR
INPUT 1.000 CALC. 1.000

FREE JET VELOCITY (FT/SEC) 387.00
FREE JET DIAMETER (IN) 48.00

REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

TEST DATE 02-27-78
LOCATION C41 ANECH CH
TAPE NO. N299
AERO. RDG. ADH989
ALPHA SB59
PAMB 29.5700
TAMB 30.20
RELHUM 44.80

MODEL TEST POINT 7112
ACUSTIC RANGE 12.2 M (40.0 FT) ARC
SIZE 154.7 SQ CM (23.99 SQ IN) - MODEL 117.96 M/SEC (387.0 FPS)
FREE-JET SPEED

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X71121

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 71.7 | 73.2 | 73.7 | 73.0 | 74.2 | 75.5 | 75.2 | 76.2 | 84.5 | 92.1 | 94.1 | 92.5 | 85.6 | 168.1 |
| 63 | 72.6 | 73.6 | 75.2 | 73.6 | 75.6 | 77.1 | 76.0 | 77.4 | 87.2 | 92.6 | 95.2 | 92.9 | 84.9 | 168.8 |
| 80 | 73.7 | 74.6 | 76.3 | 75.6 | 79.8 | 78.0 | 77.5 | 79.6 | 88.9 | 94.1 | 96.4 | 92.9 | 85.7 | 169.9 |
| 100 | 74.8 | 75.7 | 77.2 | 76.5 | 77.8 | 79.1 | 78.8 | 81.3 | 90.5 | 94.0 | 97.0 | 91.8 | 85.8 | 170.1 |
| 125 | 76.8 | 76.0 | 77.9 | 77.6 | 79.1 | 80.5 | 80.4 | 82.4 | 91.2 | 93.0 | 98.2 | 91.1 | 84.8 | 170.6 |
| 160 | 77.9 | 77.6 | 79.6 | 78.8 | 80.8 | 82.2 | 81.2 | 83.7 | 92.6 | 94.2 | 97.9 | 90.4 | 85.0 | 170.9 |
| 200 | 79.7 | 81.4 | 81.3 | 80.5 | 81.0 | 83.1 | 82.4 | 84.7 | 93.2 | 95.2 | 97.3 | 90.2 | 85.0 | 171.2 |
| 250 | 87.4 | 85.6 | 84.5 | 81.7 | 82.8 | 82.7 | 82.3 | 85.1 | 93.4 | 96.8 | 96.3 | 89.0 | 84.0 | 171.7 |
| 315 | 84.9 | 85.7 | 86.9 | 85.4 | 87.5 | 85.7 | 84.0 | 86.2 | 94.3 | 96.0 | 94.4 | 87.4 | 82.6 | 171.5 |
| 400 | 83.5 | 85.1 | 86.4 | 86.6 | 86.1 | 87.9 | 85.7 | 87.1 | 94.2 | 95.1 | 92.9 | 85.2 | 79.6 | 171.2 |
| 500 | 83.6 | 85.3 | 86.1 | 86.6 | 85.7 | 86.5 | 86.3 | 87.8 | 94.1 | 94.8 | 91.5 | 83.0 | 78.3 | 171.1 |
| 630 | 82.4 | 83.8 | 85.5 | 84.7 | 85.4 | 87.3 | 85.5 | 88.7 | 93.7 | 92.8 | 89.3 | 81.3 | 76.4 | 170.5 |
| 800 | 82.6 | 83.7 | 85.7 | 85.3 | 86.0 | 87.3 | 86.1 | 87.6 | 93.2 | 91.9 | 87.5 | 79.2 | 74.4 | 170.4 |
| 1000 | 81.1 | 83.9 | 85.4 | 85.2 | 86.9 | 87.5 | 85.9 | 87.3 | 91.7 | 90.9 | 86.0 | 78.1 | 72.1 | 170.2 |
| 1250 | 80.4 | 82.9 | 84.9 | 85.1 | 86.8 | 88.2 | 85.0 | 87.0 | 89.2 | 88.7 | 83.6 | 75.6 | 69.9 | 169.7 |
| 1600 | 76.3 | 82.0 | 83.9 | 84.7 | 86.1 | 87.0 | 84.1 | 85.4 | 88.0 | 87.7 | 81.9 | 75.0 | 69.3 | 169.9 |
| 2000 | 75.1 | 79.8 | 82.2 | 82.8 | 86.2 | 87.2 | 84.0 | 84.6 | 85.8 | 85.1 | 78.6 | 71.9 | 65.3 | 170.1 |
| 2500 | 74.4 | 78.8 | 81.9 | 82.5 | 85.4 | 85.4 | 81.1 | 80.3 | 84.2 | 80.8 | 75.0 | 67.0 | 60.1 | 170.8 |
| 3150 | 65.5 | 72.9 | 76.2 | 77.9 | 81.1 | 81.3 | 77.2 | 76.3 | 77.3 | 75.4 | 67.6 | 57.2 | 45.9 | 169.6 |
| 4000 | 57.0 | 63.7 | 69.0 | 69.6 | 71.8 | 72.5 | 70.0 | 68.9 | 70.6 | 66.6 | 58.3 | 44.3 | 29.1 | 168.4 |
| 5000 | 41.8 | 49.7 | 58.0 | 61.3 | 65.6 | 65.6 | 60.3 | 58.9 | 60.0 | 52.4 | 42.1 | 25.7 | 0.7 | 168.3 |
| 6300 | 22.1 | 32.7 | 41.9 | 46.0 | 47.3 | 47.8 | 45.1 | 40.8 | 43.7 | 32.6 | 18.4 | | | 167.2 |
| 8000 | 0.3 | 0.3 | 12.2 | 19.2 | 20.4 | 21.8 | 20.9 | 14.8 | 16.5 | 3.1 | | | | 165.5 |
| 10000 | | | | | | | | | | | | | | 163.6 |

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GASPL 93.7 94.8 96.1 95.8 97.1 97.9 96.1 97.8 104.1 105.8 106.6 101.1 94.8 183.7
 PWL 99.9 102.5 104.8 105.0 107.2 107.7 105.1 106.1 110.3 111.0 109.5 102.6 96.7
 PNLT 100.7 103.4 105.6 105.7 108.6 108.9 105.1 106.1 111.0 111.5 109.5 102.6 96.0

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 30.20
 LOCATION C41 ANECH CH AERO. RDG. ADH989 PAMB 29.5730 RELHUM 44.80

MODEL TEST POINT 7112 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.96 M/SEC (387.0 FPS)
 FREE-JET SPEED

07/19/79 18.682

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X71130
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PVL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

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FREE-JET SPEED
M/SEC (0. FPS)

SIZE
23.99 SQ IN) - MODEL

154.7 SQ CH (

ACOUSTIC RANGE
12.2 M (40.0 FT) ARC

MODEL TEST POINT
7100 7113

577

TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAMB 28.94
LOCATION C41 ANECH CH AERO. RDG. ADH078 PAMS 29.2900 RELHUM 22.40

07/19/79 10.662

578

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X71130

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

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3150000

4000000

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6300000

8000000

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12500000

16000000

20000000

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31500000

40000000

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0ASPL 118.7 118.9 118.9 118.8 119.1 119.6 119.7 121.3 126.9 132.7 133.0 130.8 127.3 169.0

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB39 TAMB 29.94
LOCATION C41 ANECH CH AERG. RDG. ADH078 PAMB 29.2900 RELHUM 22.40

MODEL TEST POINT 7113 ACQUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED
M/SEC (0. FPS)

07/19/79 16.662

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. SID. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X71131

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|------|------|-------|
| 50 | 71.1 | 74.2 | 75.5 | 76.0 | 77.6 | 78.6 | 81.5 | 83.0 | 80.0 | 92.0 | 98.6 | 97.1 | 90.7 | 172.8 |
| 63 | 72.2 | 74.3 | 77.4 | 78.1 | 79.4 | 80.9 | 82.6 | 84.1 | 91.4 | 99.1 | 100.0 | 97.4 | 90.7 | 173.9 |
| 80 | 73.5 | 76.8 | 77.9 | 78.7 | 84.7 | 82.5 | 84.0 | 86.2 | 93.7 | 100.2 | 101.5 | 97.7 | 91.0 | 175.1 |
| 100 | 78.0 | 77.6 | 79.4 | 80.9 | 81.4 | 83.4 | 85.7 | 87.9 | 95.4 | 101.7 | 102.2 | 97.7 | 90.1 | 175.9 |
| 125 | 82.7 | 85.6 | 86.0 | 84.5 | 84.0 | 85.5 | 86.5 | 88.7 | 96.0 | 101.7 | 101.7 | 96.9 | 88.5 | 175.8 |
| 160 | 85.4 | 87.6 | 87.0 | 87.0 | 87.2 | 88.0 | 87.5 | 89.7 | 96.4 | 101.9 | 102.2 | 94.7 | 86.0 | 176.1 |
| 200 | 91.0 | 89.8 | 89.9 | 89.2 | 86.7 | 87.0 | 88.5 | 90.5 | 96.3 | 101.7 | 100.7 | 93.2 | 84.7 | 175.7 |
| 250 | 88.4 | 90.4 | 91.3 | 91.1 | 89.4 | 86.9 | 87.9 | 90.6 | 96.5 | 101.5 | 98.0 | 90.6 | 82.1 | 175.0 |
| 315 | 85.6 | 88.7 | 90.4 | 91.5 | 92.5 | 91.3 | 89.7 | 90.2 | 98.3 | 101.3 | 96.4 | 89.0 | 80.2 | 175.0 |
| 400 | 83.8 | 87.2 | 88.3 | 89.6 | 90.4 | 92.2 | 91.2 | 90.9 | 96.2 | 99.9 | 94.4 | 87.3 | 78.2 | 174.3 |
| 500 | 82.4 | 85.1 | 87.0 | 87.4 | 88.4 | 89.5 | 90.7 | 90.9 | 94.9 | 97.5 | 92.5 | 85.2 | 74.7 | 172.9 |
| 630 | 80.4 | 83.3 | 85.5 | 87.1 | 88.0 | 89.0 | 89.7 | 91.6 | 93.9 | 96.5 | 91.0 | 83.0 | 72.2 | 172.4 |
| 800 | 77.9 | 82.1 | 84.9 | 86.1 | 87.4 | 88.9 | 89.2 | 90.3 | 93.3 | 95.5 | 89.1 | 80.8 | 70.5 | 172.0 |
| 1000 | 76.8 | 81.4 | 83.3 | 85.2 | 86.8 | 87.7 | 88.1 | 89.1 | 92.0 | 93.5 | 87.3 | 78.4 | 67.9 | 171.1 |
| 1250 | 74.1 | 79.6 | 82.5 | 84.2 | 86.6 | 88.2 | 87.2 | 88.4 | 90.6 | 92.2 | 85.1 | 76.3 | 65.4 | 170.8 |
| 1600 | 70.5 | 77.3 | 79.8 | 82.6 | 85.1 | 86.2 | 85.7 | 86.1 | 87.6 | 89.0 | 81.7 | 72.7 | 61.8 | 169.4 |
| 2000 | 68.0 | 75.1 | 78.5 | 81.4 | 84.6 | 85.3 | 84.0 | 84.1 | 85.0 | 86.1 | 77.9 | 69.4 | 57.1 | 169.0 |
| 2500 | 61.2 | 71.2 | 74.1 | 78.0 | 82.4 | 82.3 | 80.4 | 80.6 | 80.7 | 81.7 | 73.3 | 63.5 | 49.7 | 168.0 |
| 3150 | 56.4 | 64.6 | 70.0 | 72.5 | 77.6 | 79.1 | 78.3 | 74.3 | 76.3 | 74.4 | 65.9 | 54.2 | 39.0 | 166.7 |
| 4000 | 48.0 | 56.1 | 63.2 | 68.0 | 69.6 | 70.6 | 69.1 | 68.2 | 66.9 | 66.9 | 56.4 | 40.6 | 18.5 | 166.1 |
| 5000 | 33.4 | 43.8 | 51.9 | 56.8 | 62.4 | 63.1 | 58.9 | 57.9 | 57.7 | 54.1 | 42.0 | 22.1 | | 165.8 |
| 6300 | 8.2 | 22.9 | 32.9 | 40.2 | 44.3 | 45.8 | 44.0 | 40.3 | 42.0 | 34.3 | 18.5 | | | 164.3 |
| 8000 | | | | | | | | | | | | | | 163.7 |
| 10000 | | | | | | | | | | | | | | 165.0 |

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QASPL 95.6 97.3 98.5 99.0 99.6 100.1 100.2 101.4 106.5 111.5 110.4 105.5 98.1 186.5
 PNLT 99.7 102.3 104.0 105.4 107.1 107.8 107.1 107.6 111.8 115.5 112.1 106.4 96.6
 PNLT 100.9 102.8 104.0 105.9 108.3 108.9 107.1 107.6 112.4 116.1 113.1 105.4 97.9

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAMB 28.94
 LOCATION C41 ANECH CH AERO. RDG. ADH078 PAMB 29.2900 RELHUM 22.40

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
 7100 7113 731.5 M (2400.0 FT) SL 9032.2 SQ CH (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FM3DL X71140
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 85.9 | 88.2 | 88.7 | 90.0 | 90.1 | 92.5 | 94.7 | 97.6 | 102.6 | 108.6 | 112.5 | 116.5 | 116.4 | 149.5 |
| 315 | 87.1 | 87.6 | 88.9 | 89.4 | 91.0 | 93.4 | 93.5 | 96.7 | 103.9 | 111.2 | 114.6 | 118.1 | 116.0 | 150.9 |
| 400 | 89.1 | 89.1 | 90.9 | 89.7 | 91.3 | 93.4 | 94.6 | 97.7 | 105.4 | 114.3 | 117.7 | 119.1 | 115.0 | 152.5 |
| 500 | 89.7 | 89.7 | 91.8 | 91.3 | 93.1 | 95.0 | 96.1 | 98.8 | 107.0 | 116.1 | 119.7 | 119.7 | 113.1 | 153.8 |
| 630 | 90.6 | 90.8 | 92.9 | 92.7 | 98.3 | 96.6 | 97.8 | 101.7 | 109.9 | 117.7 | 120.6 | 118.8 | 115.2 | 164.4 |
| 800 | 96.1 | 94.9 | 95.4 | 94.9 | 95.8 | 97.6 | 99.0 | 102.7 | 111.9 | 119.5 | 122.4 | 118.0 | 108.7 | 155.6 |
| 1000 | 104.0 | 102.2 | 100.5 | 98.5 | 97.9 | 99.7 | 100.9 | 104.8 | 113.3 | 120.3 | 123.2 | 116.1 | 107.3 | 156.3 |
| 1250 | 108.8 | 108.9 | 107.4 | 102.9 | 101.7 | 102.6 | 102.7 | 105.2 | 113.8 | 120.5 | 124.3 | 116.0 | 106.7 | 157.2 |
| 1600 | 110.4 | 109.8 | 110.8 | 108.8 | 104.6 | 103.8 | 103.6 | 107.3 | 114.7 | 120.4 | 123.8 | 114.8 | 106.8 | 167.1 |
| 2000 | 107.6 | 108.4 | 109.9 | 109.9 | 109.7 | 106.6 | 104.2 | 107.7 | 113.3 | 121.2 | 122.2 | 113.6 | 105.9 | 156.6 |
| 2500 | 104.8 | 105.3 | 106.8 | 106.8 | 109.4 | 110.8 | 108.4 | 108.6 | 114.7 | 121.4 | 120.4 | 113.1 | 104.8 | 156.2 |
| 3150 | 104.6 | 104.4 | 105.4 | 105.2 | 106.2 | 108.8 | 110.7 | 110.4 | 116.3 | 120.0 | 119.2 | 111.9 | 103.4 | 155.6 |
| 4000 | 103.9 | 103.3 | 105.3 | 103.5 | 104.6 | 106.2 | 108.9 | 111.3 | 116.0 | 119.2 | 118.1 | 109.5 | 102.0 | 154.8 |
| 5000 | 103.1 | 103.3 | 104.0 | 103.5 | 104.8 | 106.7 | 107.5 | 111.5 | 115.9 | 118.5 | 116.5 | 108.2 | 100.9 | 154.3 |
| 6300 | 102.5 | 102.9 | 104.1 | 103.6 | 104.6 | 106.9 | 107.1 | 111.1 | 116.0 | 117.1 | 114.6 | 107.1 | 100.7 | 153.7 |
| 8000 | 101.9 | 102.9 | 103.7 | 103.6 | 104.6 | 106.0 | 106.6 | 110.2 | 115.4 | 116.1 | 113.5 | 105.2 | 99.0 | 153.2 |
| 10000 | 101.1 | 102.1 | 103.5 | 103.0 | 105.1 | 106.8 | 105.7 | 109.7 | 113.6 | 115.4 | 111.8 | 104.5 | 97.9 | 152.8 |
| 12500 | 99.5 | 100.9 | 101.9 | 102.2 | 104.4 | 105.6 | 105.0 | 106.9 | 111.1 | 112.9 | 109.1 | 101.8 | 96.8 | 151.5 |
| 16000 | 97.5 | 99.6 | 101.2 | 101.7 | 104.2 | 105.2 | 102.9 | 105.7 | 109.2 | 111.5 | 106.8 | 101.0 | 95.5 | 151.4 |
| 20000 | 92.6 | 96.7 | 98.5 | 98.8 | 102.9 | 103.7 | 100.8 | 102.9 | 106.1 | 107.9 | 103.0 | 97.9 | 93.9 | 150.3 |
| 25000 | 91.4 | 93.1 | 95.3 | 95.4 | 100.5 | 101.4 | 97.9 | 98.4 | 103.3 | 103.2 | 99.7 | 94.6 | 91.7 | 149.3 |
| 31500 | 89.7 | 89.6 | 93.1 | 94.2 | 95.4 | 95.7 | 94.8 | 95.7 | 98.9 | 100.8 | 96.7 | 90.4 | 86.2 | 148.9 |
| 40000 | 84.9 | 84.3 | 87.6 | 88.2 | 92.7 | 93.9 | 89.5 | 90.5 | 94.0 | 95.0 | 92.2 | 84.7 | 81.9 | 148.4 |
| 50000 | 77.5 | 77.9 | 80.4 | 82.6 | 84.5 | 86.2 | 84.7 | 83.7 | 89.7 | 88.3 | 84.7 | 78.4 | 75.8 | 146.3 |
| 63000 | 71.4 | 71.7 | 74.3 | 75.9 | 76.3 | 77.7 | 78.5 | 77.3 | 85.0 | 81.5 | 78.7 | 73.1 | 70.2 | 145.4 |
| 80000 | 65.2 | 65.1 | 68.1 | 70.7 | 69.9 | 72.6 | 71.1 | 71.8 | 79.0 | 77.1 | 73.7 | 64.6 | 62.0 | 146.5 |
| GASPL | 116.5 | 116.6 | 117.4 | 116.5 | 117.2 | 118.3 | 118.1 | 120.6 | 126.3 | 131.0 | 132.5 | 127.9 | 122.6 | 167.7 |

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TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 29.30
LOCATION C41 ANECH CH AERO. RDG. ADH90 PAMB 29.5700 RELHUM 44.60

MODEL TEST POINT 7114 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.96 M/SEC (367.0 FPS)
FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X71141

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|-------|------|------|-------|
| 50 | 72.7 | 73.5 | 74.4 | 73.2 | 74.8 | 75.7 | 75.9 | 77.3 | 86.3 | 93.9 | 96.0 | 95.2 | 85.6 | 170.3 |
| 63 | 73.2 | 74.0 | 75.7 | 74.1 | 76.9 | 77.4 | 77.4 | 78.7 | 88.9 | 95.4 | 97.2 | 95.0 | 87.6 | 171.0 |
| 80 | 74.9 | 75.4 | 77.3 | 76.0 | 82.0 | 79.0 | 78.6 | 81.2 | 91.1 | 97.4 | 99.2 | 95.4 | 88.6 | 172.6 |
| 100 | 76.0 | 76.7 | 78.4 | 77.5 | 79.1 | 80.1 | 80.0 | 82.1 | 92.7 | 98.5 | 100.4 | 94.4 | 89.4 | 173.5 |
| 125 | 79.2 | 78.7 | 79.4 | 78.7 | 81.3 | 82.3 | 81.9 | 84.1 | 93.2 | 98.5 | 101.3 | 94.0 | 88.5 | 174.0 |
| 160 | 88.7 | 87.4 | 85.4 | 82.8 | 85.2 | 85.2 | 83.7 | 85.5 | 94.2 | 98.5 | 100.9 | 92.8 | 88.5 | 174.2 |
| 200 | 93.4 | 94.0 | 92.3 | 87.1 | 88.0 | 86.4 | 84.7 | 86.7 | 94.8 | 99.3 | 99.1 | 91.4 | 87.1 | 174.6 |
| 250 | 94.4 | 94.3 | 95.2 | 92.7 | 93.1 | 89.2 | 85.3 | 87.0 | 94.3 | 99.5 | 97.2 | 90.6 | 85.5 | 175.0 |
| 315 | 89.2 | 91.2 | 93.3 | 93.3 | 93.2 | 93.5 | 89.5 | 88.0 | 96.0 | 98.2 | 96.0 | 89.1 | 83.4 | 174.4 |
| 400 | 86.4 | 89.8 | 91.5 | 91.1 | 90.1 | 92.6 | 91.9 | 89.9 | 95.9 | 97.6 | 94.9 | 86.4 | 81.0 | 174.0 |
| 500 | 87.7 | 89.6 | 89.9 | 89.3 | 88.4 | 89.2 | 90.3 | 91.0 | 95.8 | 96.5 | 93.0 | 84.5 | 79.0 | 173.2 |
| 630 | 85.2 | 86.2 | 89.0 | 87.3 | 89.0 | 90.0 | 89.2 | 91.2 | 95.7 | 94.8 | 90.6 | 82.8 | 77.9 | 172.7 |
| 800 | 85.1 | 86.7 | 88.1 | 87.6 | 88.5 | 90.1 | 88.6 | 90.6 | 94.9 | 93.6 | 89.2 | 80.4 | 75.1 | 172.4 |
| 1000 | 83.9 | 85.9 | 87.9 | 87.4 | 88.4 | 89.0 | 88.2 | 89.5 | 93.1 | 92.9 | 87.2 | 79.3 | 73.1 | 172.0 |
| 1250 | 82.6 | 85.4 | 87.1 | 87.1 | 88.8 | 89.6 | 88.9 | 89.0 | 90.7 | 90.4 | 84.3 | 76.0 | 70.8 | 171.3 |
| 1600 | 80.7 | 83.7 | 83.1 | 85.9 | 87.8 | 88.2 | 88.1 | 85.9 | 88.9 | 88.9 | 81.7 | 74.4 | 67.7 | 171.0 |
| 2000 | 77.6 | 81.5 | 83.6 | 84.3 | 87.4 | 87.6 | 83.8 | 84.5 | 86.6 | 86.1 | 78.7 | 71.9 | 66.1 | 170.9 |
| 2500 | 73.4 | 78.5 | 81.7 | 82.8 | 86.0 | 85.6 | 81.7 | 81.7 | 84.4 | 81.7 | 76.2 | 67.3 | 60.2 | 171.1 |
| 3150 | 67.1 | 74.8 | 78.1 | 78.8 | 82.3 | 82.3 | 77.6 | 76.2 | 77.9 | 76.4 | 68.3 | 57.6 | 46.1 | 170.5 |
| 4000 | 56.0 | 65.6 | 70.4 | 71.3 | 73.7 | 73.4 | 71.1 | 69.5 | 70.7 | 67.6 | 58.3 | 44.9 | 29.2 | 169.5 |
| 5000 | 44.0 | 51.6 | 59.4 | 62.7 | 66.5 | 66.8 | 61.1 | 59.4 | 60.5 | 53.7 | 42.4 | 26.3 | 1.6 | 169.3 |
| 6300 | 23.7 | 33.8 | 43.3 | 46.7 | 48.2 | 49.2 | 46.2 | 41.8 | 44.5 | 33.4 | 19.3 | | | 168.3 |
| 8000 | | 1.7 | 13.6 | 20.8 | 21.3 | 22.9 | 21.8 | 16.0 | 17.7 | 4.5 | | | | 166.7 |
| 10000 | | | | | | | | | | | | | | 164.9 |

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GASPL 99.7 100.4 101.3 100.1 100.8 100.9 99.2 100.0 105.6 108.6 108.0 103.3 97.6 186.0
 PNL 104.9 106.2 107.7 107.1 109.3 109.3 106.7 107.2 111.8 113.4 111.2 104.1 98.7
 PNL 105.4 107.0 108.5 107.7 110.5 110.5 107.2 107.2 112.4 113.4 111.2 104.1 99.6

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMS 29.30
 LOCATION C41 ANECH CH AERO. RDC. ADH990 PAMB 29.5700 RELHJM 44.80

MODEL TEST POINT ACQUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE FREE-JET SPEED
 7100 7114 117.96 M/SEC (387.0 FPS)

07/19/79 18.682

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SA 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X72010
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PW

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PW |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 88.8 | 91.8 | 90.8 | 91.1 | 92.0 | 94.1 | 103.2 | 98.1 | 103.3 | 102.7 | 112.8 | 116.0 | 115.6 | 149.4 |
| 315 | 88.1 | 90.7 | 91.2 | 91.5 | 93.8 | 95.7 | 102.6 | 98.2 | 105.4 | 111.3 | 115.1 | 117.6 | 115.7 | 151.0 |
| 400 | 90.2 | 92.5 | 92.0 | 92.5 | 93.9 | 96.2 | 104.1 | 98.6 | 106.7 | 114.9 | 117.7 | 116.6 | 115.0 | 152.6 |
| 500 | 91.3 | 93.3 | 94.1 | 93.9 | 95.9 | 97.3 | 104.7 | 100.9 | 108.3 | 117.1 | 119.8 | 119.4 | 115.4 | 154.2 |
| 630 | 92.9 | 94.7 | 95.4 | 95.2 | 102.8 | 98.2 | 106.1 | 103.0 | 110.9 | 118.3 | 120.4 | 119.3 | 116.0 | 154.9 |
| 800 | 97.2 | 95.5 | 96.7 | 97.3 | 98.1 | 99.7 | 107.9 | 104.0 | 112.7 | 120.3 | 121.7 | 119.6 | 116.3 | 156.2 |
| 1000 | 102.0 | 102.8 | 102.8 | 101.6 | 100.2 | 101.6 | 108.7 | 105.1 | 113.3 | 120.2 | 121.0 | 119.2 | 114.9 | 156.0 |
| 1250 | 98.1 | 102.5 | 102.5 | 102.8 | 103.6 | 104.5 | 110.3 | 106.8 | 113.4 | 119.6 | 122.2 | 118.6 | 113.7 | 156.2 |
| 1600 | 104.5 | 101.1 | 100.4 | 100.4 | 101.0 | 103.4 | 110.2 | 106.7 | 113.8 | 120.2 | 121.7 | 117.1 | 112.4 | 156.0 |
| 2000 | 105.9 | 105.7 | 104.2 | 102.2 | 100.6 | 102.2 | 110.1 | 106.7 | 113.9 | 119.3 | 119.8 | 115.0 | 110.2 | 154.9 |
| 2500 | 105.8 | 105.6 | 105.6 | 105.1 | 103.4 | 103.1 | 111.4 | 107.1 | 113.5 | 119.7 | 118.1 | 114.3 | 109.3 | 154.7 |
| 3150 | 103.3 | 105.1 | 103.8 | 104.6 | 104.7 | 105.0 | 110.9 | 107.4 | 113.5 | 118.5 | 116.9 | 113.3 | 108.6 | 153.9 |
| 4000 | 101.5 | 102.6 | 103.1 | 102.6 | 103.4 | 104.8 | 110.2 | 107.4 | 112.8 | 116.7 | 115.4 | 111.6 | 106.6 | 152.7 |
| 5000 | 100.1 | 100.9 | 101.4 | 102.2 | 103.0 | 104.3 | 111.0 | 107.4 | 112.1 | 116.3 | 114.2 | 110.6 | 105.9 | 152.3 |
| 6300 | 98.3 | 100.6 | 101.4 | 100.8 | 102.1 | 104.5 | 110.9 | 106.9 | 111.3 | 115.2 | 113.0 | 109.1 | 106.1 | 151.7 |
| 8000 | 96.8 | 99.7 | 100.3 | 100.9 | 101.8 | 103.4 | 109.9 | 106.3 | 110.7 | 113.8 | 111.4 | 107.8 | 104.6 | 150.9 |
| 10000 | 94.7 | 98.6 | 100.0 | 101.9 | 103.3 | 108.3 | 108.9 | 105.5 | 108.8 | 112.5 | 109.5 | 106.8 | 103.7 | 150.2 |
| 12500 | 92.0 | 97.0 | 98.3 | 100.9 | 102.0 | 107.7 | 104.1 | 106.4 | 109.7 | 107.2 | 104.3 | 101.3 | 149.0 | |
| 16000 | 90.2 | 95.1 | 96.7 | 97.8 | 100.5 | 101.3 | 106.2 | 102.3 | 104.5 | 108.6 | 105.1 | 102.9 | 99.6 | 148.9 |
| 20000 | 85.2 | 92.7 | 93.7 | 95.4 | 98.9 | 99.3 | 103.9 | 99.0 | 101.5 | 104.7 | 102.0 | 100.3 | 97.1 | 147.8 |
| 25000 | 83.7 | 88.7 | 91.3 | 91.9 | 97.0 | 98.9 | 101.2 | 94.4 | 98.8 | 100.0 | 97.7 | 96.4 | 95.1 | 146.9 |
| 31500 | 81.8 | 85.0 | 89.0 | 90.4 | 91.0 | 91.8 | 97.4 | 91.4 | 94.5 | 97.5 | 94.9 | 91.0 | 89.1 | 146.3 |
| 40000 | 77.0 | 80.5 | 82.9 | 85.5 | 89.2 | 89.7 | 92.5 | 86.8 | 89.2 | 92.0 | 89.9 | 86.0 | 85.2 | 145.7 |
| 50000 | 69.9 | 73.6 | 76.1 | 79.6 | 81.0 | 81.8 | 87.5 | 79.7 | 85.6 | 85.8 | 84.2 | 81.0 | 79.1 | 144.2 |
| 63000 | 64.8 | 66.8 | 70.0 | 72.2 | 73.1 | 73.7 | 82.3 | 73.3 | 81.9 | 80.1 | 78.4 | 76.5 | 73.6 | 144.1 |
| 80000 | 58.3 | 60.5 | 64.5 | 67.5 | 68.7 | 68.2 | 77.9 | 68.1 | 75.7 | 74.9 | 73.9 | 68.7 | 66.9 | 145.6 |
| OASPL | 113.0 | 113.8 | 113.7 | 113.5 | 114.3 | 115.3 | 121.9 | 118.1 | 124.2 | 130.1 | 130.9 | 128.9 | 125.3 | 166.6 |

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TEST DATE 02-20-78 TAPE NO. N294 ALPHA S859 TAMB 29.12
LOCATION C41 ANECH CH AERO. RDG. ADH075 PAMB 29.2980 RELHUM 20.20

MODEL TEST POINT 7201 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED 0. M/SEC (0. FPS)

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SR 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X72010

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

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GASPL 113.0 113.8 113.7 113.5 114.3 115.3 121.9 118.1 124.2 130.1 130.9 128.9 125.3 166.6

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-20-78 TAPE NO. N294 ALPHA 3859 TAMB 29.12
LOCATION C41 ANECH CH AERO. RDG. ADH075 PAMB 29.2980 RELHUM 20.20

MODEL TEST POINT 7201 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED
M/SEC (0. FPS)

07/19/79 18.682

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 2400.0 FT., SL

IDENTIFICATION - FJ-ZER-FMODL X72011

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 68.4 | 72.2 | 72.8 | 74.1 | 75.8 | 78.3 | 86.1 | 80.1 | 87.6 | 94.6 | 95.9 | 94.6 | 87.7 | 170.3 |
| 63 | 69.4 | 73.0 | 74.9 | 75.4 | 77.9 | 79.4 | 86.6 | 82.4 | 89.1 | 96.9 | 98.0 | 95.4 | 88.0 | 171.9 |
| 80 | 71.0 | 74.4 | 76.2 | 76.7 | 84.5 | 80.2 | 88.0 | 84.5 | 91.7 | 97.9 | 98.5 | 95.2 | 88.5 | 172.5 |
| 100 | 75.2 | 75.1 | 77.4 | 78.7 | 80.0 | 81.7 | 89.7 | 85.5 | 93.4 | 99.4 | 99.7 | 95.4 | 88.6 | 173.9 |
| 125 | 80.0 | 82.4 | 83.5 | 83.0 | 82.0 | 83.5 | 90.5 | 88.5 | 94.0 | 99.7 | 99.0 | 94.9 | 87.0 | 173.6 |
| 160 | 75.9 | 81.8 | 83.0 | 84.0 | 85.5 | 86.2 | 92.0 | 88.0 | 93.9 | 98.9 | 99.9 | 94.0 | 85.5 | 173.9 |
| 200 | 82.0 | 80.3 | 80.7 | 81.5 | 82.5 | 85.0 | 91.7 | 87.7 | 94.1 | 99.4 | 99.2 | 92.2 | 83.7 | 173.7 |
| 250 | 83.1 | 84.6 | 84.3 | 83.1 | 81.9 | 83.6 | 91.4 | 87.6 | 93.9 | 98.2 | 96.9 | 89.6 | 80.9 | 172.6 |
| 315 | 82.6 | 84.1 | 85.4 | 85.7 | 84.5 | 84.2 | 92.5 | 87.7 | 93.3 | 98.3 | 94.9 | 88.4 | 79.2 | 172.4 |
| 400 | 79.5 | 83.2 | 83.3 | 84.9 | 85.4 | 85.9 | 91.7 | 87.6 | 92.9 | 96.6 | 93.1 | 86.8 | 77.4 | 171.6 |
| 500 | 77.3 | 80.3 | 82.2 | 82.6 | 83.9 | 85.4 | 91.1 | 87.3 | 91.8 | 94.5 | 91.2 | 84.4 | 74.4 | 170.4 |
| 630 | 75.4 | 78.2 | 80.2 | 81.8 | 83.2 | 84.7 | 91.2 | 87.1 | 90.8 | 93.7 | 89.3 | 82.7 | 72.7 | 169.9 |
| 800 | 73.1 | 77.6 | 79.8 | 80.0 | 82.1 | 84.6 | 90.9 | 86.3 | 89.7 | 92.2 | 87.8 | 80.5 | 71.7 | 169.3 |
| 1000 | 71.2 | 76.4 | 78.5 | 80.2 | 81.5 | 83.4 | 89.7 | 88.3 | 88.9 | 90.5 | 85.7 | 78.6 | 69.1 | 168.6 |
| 1250 | 68.5 | 75.1 | 77.6 | 79.1 | 81.6 | 82.2 | 88.6 | 84.5 | 86.8 | 88.8 | 83.3 | 76.8 | 66.8 | 167.9 |
| 1600 | 65.0 | 72.8 | 75.5 | 77.3 | 80.3 | 81.6 | 87.1 | 82.8 | 84.0 | 85.4 | 80.2 | 72.9 | 62.0 | 166.6 |
| 2000 | 62.2 | 70.3 | 73.9 | 76.3 | 79.7 | 80.7 | 85.4 | 80.8 | 81.7 | 83.8 | 77.1 | 69.9 | 57.3 | 166.6 |
| 2500 | 55.4 | 66.6 | 70.0 | 73.2 | 77.6 | 78.4 | 82.6 | 76.8 | 77.8 | 78.7 | 72.2 | 64.4 | 49.8 | 165.5 |
| 3150 | 50.6 | 60.2 | 65.7 | 68.2 | 74.3 | 74.5 | 78.5 | 70.7 | 73.2 | 71.5 | 64.5 | 55.6 | 39.4 | 164.5 |
| 4000 | 42.4 | 51.8 | 59.6 | 63.4 | 65.3 | 66.5 | 71.7 | 64.4 | 65.2 | 64.3 | 55.6 | 41.2 | 19.0 | 163.9 |
| 5000 | 27.4 | 39.7 | 47.3 | 53.0 | 58.5 | 59.6 | 61.8 | 54.3 | 53.6 | 51.3 | 40.7 | 22.6 | 163.4 | |
| 6300 | 2.9 | 18.6 | 28.4 | 35.3 | 40.2 | 41.8 | 46.7 | 36.4 | 37.9 | 30.8 | 17.2 | | 161.8 | |
| 8000 | | | 1.0 | 9.7 | 14.2 | 16.0 | 23.3 | 10.9 | 12.9 | 0.2 | | | 161.7 | |
| 10000 | | | | | | | | | | | | | 163.3 | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GASPL 89.9 92.1 93.2 93.8 95.0 96.0 102.5 98.3 103.9 108.9 108.2 103.7 96.1 184.1
 PNLT 93.9 97.3 99.1 100.2 102.4 103.5 109.2 104.5 106.6 112.6 110.5 104.2 95.6
 PNLT 95.1 98.3 99.5 100.2 103.7 104.7 109.2 104.5 109.3 113.2 110.5 104.2 95.7

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-20-78 TAPE NO. N294 IALPHA SB59 TAMB 29.12
 LOCATION C41 ANECH CH AERO. RDG. ADH075 PAMB 29.2980 RELHUM 20.20

MODEL TEST POINT 7201 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. FREE-JET SPEED
 7200 7201 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-150-FMODL X72020
BACKGROUND FJB150-AMODL X01500

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 85.3 | 89.6 | 88.8 | 89.6 | 90.0 | 92.6 | 95.0 | 97.1 | 99.8 | 107.1 | 112.0 | 115.5 | 115.1 | 148.5 |
| 315 | 86.9 | 88.2 | 89.2 | 90.0 | 91.8 | 93.9 | 94.3 | 97.0 | 101.7 | 109.7 | 113.9 | 117.1 | 115.2 | 149.9 |
| 400 | 88.4 | 88.9 | 90.7 | 90.0 | 91.6 | 93.7 | 95.3 | 97.5 | 102.7 | 113.3 | 116.7 | 118.6 | 114.8 | 151.8 |
| 500 | 88.2 | 90.3 | 91.5 | 92.1 | 92.4 | 95.3 | 96.4 | 98.6 | 104.3 | 115.6 | 119.2 | 119.4 | 114.6 | 153.4 |
| 630 | 91.1 | 91.1 | 92.9 | 93.2 | 94.3 | 96.9 | 97.8 | 100.7 | 107.4 | 116.9 | 120.3 | 119.5 | 114.4 | 154.3 |
| 800 | 94.3 | 92.4 | 94.4 | 94.9 | 95.8 | 98.4 | 99.0 | 102.4 | 108.9 | 118.0 | 121.9 | 119.8 | 113.4 | 155.3 |
| 1000 | 99.9 | 99.0 | 99.5 | 98.3 | 98.1 | 99.2 | 100.9 | 104.0 | 110.0 | 118.8 | 122.2 | 119.4 | 112.5 | 155.6 |
| 1250 | 98.0 | 101.3 | 102.8 | 102.4 | 102.5 | 102.6 | 102.2 | 104.9 | 109.8 | 118.2 | 123.0 | 119.7 | 110.4 | 156.0 |
| 1600 | 103.6 | 99.4 | 98.7 | 99.0 | 100.6 | 102.5 | 103.1 | 106.0 | 110.7 | 117.8 | 122.8 | 118.0 | 108.7 | 155.5 |
| 2000 | 103.8 | 104.0 | 103.5 | 100.3 | 98.4 | 100.3 | 102.4 | 105.8 | 111.0 | 117.9 | 121.3 | 115.8 | 105.6 | 154.8 |
| 2500 | 103.2 | 104.2 | 105.2 | 104.7 | 102.8 | 101.7 | 103.1 | 105.2 | 110.2 | 117.8 | 119.8 | 114.0 | 104.2 | 153.8 |
| 3150 | 102.0 | 102.2 | 103.3 | 103.8 | 104.4 | 104.5 | 103.6 | 106.3 | 111.3 | 116.6 | 118.8 | 112.0 | 101.8 | 153.0 |
| 4000 | 99.8 | 99.4 | 101.2 | 101.7 | 102.0 | 104.3 | 104.7 | 106.4 | 110.4 | 115.6 | 116.5 | 109.9 | 100.1 | 151.6 |
| 5000 | 99.8 | 99.1 | 99.4 | 100.1 | 101.5 | 103.8 | 105.2 | 106.9 | 109.7 | 115.6 | 114.9 | 107.6 | 99.1 | 151.1 |
| 6300 | 97.7 | 98.4 | 99.9 | 99.9 | 100.3 | 103.2 | 103.9 | 106.6 | 109.2 | 113.8 | 113.8 | 106.6 | 98.3 | 150.1 |
| 8000 | 97.8 | 98.8 | 99.2 | 99.8 | 100.8 | 102.4 | 103.6 | 106.4 | 108.9 | 112.5 | 112.2 | 105.3 | 96.9 | 149.6 |
| 10000 | 97.0 | 98.0 | 99.1 | 99.2 | 101.0 | 102.6 | 102.3 | 105.9 | 107.9 | 111.7 | 111.2 | 105.1 | 96.0 | 149.3 |
| 12500 | 94.5 | 96.6 | 97.5 | 98.0 | 99.8 | 101.2 | 100.4 | 103.8 | 105.9 | 109.2 | 109.2 | 102.9 | 95.3 | 148.1 |
| 16000 | 93.6 | 96.0 | 97.4 | 97.6 | 99.7 | 100.9 | 99.4 | 102.8 | 104.0 | 108.1 | 106.7 | 101.3 | 93.2 | 148.1 |
| 20000 | 88.5 | 93.6 | 94.1 | 95.9 | 98.6 | 99.9 | 96.8 | 99.5 | 101.8 | 104.4 | 103.6 | 98.6 | 91.3 | 147.1 |
| 25000 | 87.7 | 89.8 | 92.4 | 92.5 | 97.1 | 96.4 | 93.8 | 94.6 | 99.2 | 99.7 | 99.4 | 94.9 | 89.5 | 145.9 |
| 31500 | 85.3 | 86.2 | 89.7 | 91.4 | 91.7 | 92.2 | 90.8 | 91.7 | 95.8 | 99.1 | 96.6 | 89.3 | 84.1 | 146.3 |
| 40000 | 80.6 | 81.5 | 84.7 | 85.8 | 89.7 | 89.9 | 85.8 | 86.6 | 90.2 | 93.9 | 91.3 | 83.9 | 79.6 | 145.6 |
| 50000 | 74.0 | 74.7 | 77.4 | 79.7 | 81.6 | 82.0 | 81.2 | 79.8 | 85.4 | 88.0 | 85.9 | 78.4 | 73.8 | 143.9 |
| 63000 | 68.2 | 69.2 | 71.4 | 73.3 | 73.4 | 74.0 | 75.3 | 73.5 | 80.8 | 81.3 | 79.2 | 72.4 | 67.5 | 142.9 |
| 80000 | 62.2 | 62.6 | 65.6 | 68.2 | 66.8 | 66.7 | 67.5 | 68.3 | 75.1 | 75.6 | 74.7 | 64.4 | 59.6 | 144.0 |
| QASPL | 111.7 | 111.9 | 112.7 | 112.5 | 113.0 | 114.3 | 114.7 | 117.4 | 121.5 | 128.5 | 131.6 | 128.9 | 123.5 | 165.9 |

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TEST DATE 02-27-78 TAPE NO. N299 IALPHA SB59 TAMB 33.00
LOCATION C41 ANECH CH AERO. RDG. ADH131 PAMB 29.5900 RELHUM 59.70

MODEL TEST POINT 7202 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 45.11 M/SEC (148.0 FPS)
FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 24 40.0 FT. ARC

IDENTIFICATION - FJ-150-FMODL X72020

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

15000

20000

25000

31500

40000

50000

63000

80000

100000

125000

150000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1500000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

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GASPL 114.1 114.0 114.4 113.9 114.0 114.9 114.6 118.8 121.0 127.6 130.8 128.9 124.3 165.7

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000: CALC. 1.000 FREE JET VELOCITY (FT/SEC) 148.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 3859 TAMB 33.00
LOCATION C41 ANECH CH AERO. RDG. ADH131 PAMB 29.5900 RELHUM 59.70

MODEL TEST POINT 7202 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 164.7 SQ CM (23.99 SQ IN) - MODEL SIZE 45.11 M/SEC (148.0 FPS) FREE-JET SPEED

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-150-FMODL X72021

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PNL |
|-------|------|------|------|------|------|------|------|------|------|------|-------|------|------|-------|
| 50 | 69.3 | 71.0 | 73.3 | 72.7 | 74.2 | 75.8 | 76.9 | 78.3 | 82.7 | 91.9 | 93.7 | 93.7 | 93.1 | 166.6 |
| 63 | 70.1 | 72.3 | 74.1 | 74.6 | 75.0 | 77.4 | 77.9 | 79.2 | 84.2 | 94.3 | 96.4 | 94.9 | 88.6 | 170.4 |
| 80 | 71.9 | 73.1 | 75.4 | 75.9 | 76.8 | 79.0 | 79.2 | 81.3 | 87.3 | 95.6 | 97.5 | 95.2 | 88.5 | 171.4 |
| 100 | 75.0 | 74.2 | 76.9 | 77.6 | 78.3 | 80.5 | 83.4 | 82.9 | 88.8 | 96.6 | 99.1 | 95.8 | 88.3 | 172.5 |
| 125 | 80.0 | 80.2 | 81.4 | 80.5 | 80.4 | 81.2 | 82.2 | 84.4 | 89.9 | 97.5 | 99.5 | 95.6 | 85.8 | 172.9 |
| 160 | 78.2 | 82.6 | 85.0 | 84.8 | 84.8 | 84.7 | 83.4 | 85.1 | 89.6 | 96.6 | 100.1 | 95.6 | 83.7 | 173.3 |
| 200 | 83.3 | 80.4 | 80.4 | 81.0 | 82.6 | 84.2 | 84.2 | 86.1 | 90.3 | 96.0 | 99.5 | 93.5 | 79.7 | 172.6 |
| 250 | 83.4 | 84.9 | 85.2 | 82.2 | 80.3 | 81.9 | 83.3 | 85.7 | 90.4 | 95.8 | 97.6 | 90.7 | 77.7 | 171.6 |
| 315 | 81.9 | 84.4 | 86.3 | 86.3 | 84.4 | 83.1 | 83.7 | 85.9 | 89.3 | 95.4 | 93.7 | 88.3 | 74.8 | 170.9 |
| 400 | 80.5 | 82.4 | 84.3 | 85.3 | 85.9 | 85.6 | 84.0 | 85.7 | 90.0 | 93.9 | 94.3 | 85.8 | 72.0 | 170.2 |
| 500 | 78.3 | 79.5 | 82.2 | 83.0 | 83.3 | 85.3 | 85.0 | 85.6 | 88.9 | 92.5 | 91.6 | 83.1 | 70.2 | 168.9 |
| 630 | 77.7 | 78.8 | 80.1 | 81.3 | 82.6 | 84.6 | 85.3 | 85.3 | 88.0 | 92.3 | 89.7 | 80.2 | 68.5 | 168.4 |
| 800 | 75.2 | 77.7 | 80.3 | 80.8 | 81.3 | 83.9 | 83.8 | 85.5 | 87.4 | 90.3 | 88.2 | 78.7 | 66.3 | 167.6 |
| 1000 | 74.9 | 77.9 | 79.4 | 80.6 | 81.7 | 83.1 | 83.4 | 85.2 | 87.0 | 89.1 | 86.4 | 77.0 | 64.7 | 167.3 |
| 1250 | 73.5 | 76.7 | 79.2 | 80.0 | 82.0 | 83.4 | 82.3 | 84.8 | 86.0 | 87.9 | 85.0 | 76.2 | 63.2 | 167.3 |
| 1600 | 70.2 | 74.8 | 77.3 | 78.6 | 80.6 | 81.8 | 82.6 | 83.8 | 85.1 | 82.5 | 72.9 | 59.7 | 59.7 | 166.3 |
| 2000 | 68.3 | 73.7 | 76.9 | 78.1 | 80.7 | 81.8 | 79.6 | 81.8 | 81.9 | 83.8 | 79.4 | 70.1 | 55.7 | 166.7 |
| 2500 | 62.3 | 70.9 | 73.5 | 76.3 | 79.4 | 80.6 | 76.8 | 78.2 | 79.3 | 79.3 | 74.9 | 65.1 | 50.1 | 166.3 |
| 3150 | 56.2 | 64.8 | 70.0 | 71.7 | 76.9 | 76.2 | 72.8 | 72.3 | 75.3 | 72.7 | 68.0 | 57.0 | 37.2 | 165.7 |
| 4000 | 48.6 | 55.8 | 63.2 | 67.3 | 69.8 | 69.6 | 67.3 | 66.6 | 68.5 | 67.7 | 59.1 | 48.6 | 19.0 | 166.2 |
| 5000 | 35.1 | 44.4 | 52.7 | 56.8 | 62.2 | 62.8 | 57.6 | 56.2 | 56.6 | 55.0 | 44.1 | 33.5 | | 165.8 |
| 6300 | 10.7 | 23.3 | 33.3 | 39.9 | 44.0 | 45.0 | 43.0 | 38.5 | 39.9 | 34.8 | 20.9 | | | 163.9 |
| 8000 | | | 5.3 | 13.9 | 17.5 | 19.2 | 18.5 | 13.0 | 13.9 | 3.3 | | | | 162.8 |
| 10000 | | | | | | | | | | | | | | 164.0 |

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DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 IALPHA SB59 TAMB 33.00
LOCATION C41 ANECH CH AERO. RDG. ADH131 PAMB 29.5900 RELHUM 59.70

MODEL TEST POINT 7202 ACOUSTIC RANGE 791.5 M (2400.0 FT) SL 9022.2 SQ CM (1400.00 SQ IN) - FULL 45.11 M/SEC (148.0 FPS) FREE-JET SPEED

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 98 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FM00L X72030
BACKGROUND FJB300-FM00L X01300

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 83.5 | 87.1 | 87.3 | 87.9 | 88.7 | 90.8 | 93.6 | 95.4 | 98.1 | 105.4 | 110.0 | 114.2 | 113.6 | 147.0 |
| 315 | 85.1 | 86.6 | 87.1 | 87.7 | 88.3 | 92.2 | 92.3 | 95.0 | 99.9 | 107.7 | 111.9 | 115.6 | 113.7 | 146.2 |
| 400 | 87.4 | 87.7 | 89.1 | 88.2 | 89.8 | 92.2 | 93.6 | 95.5 | 101.2 | 112.0 | 115.2 | 117.3 | 113.3 | 150.4 |
| 500 | 87.5 | 88.3 | 90.2 | 89.6 | 91.2 | 94.0 | 94.7 | 97.1 | 103.0 | 113.6 | 117.2 | 117.7 | 111.6 | 151.4 |
| 630 | 88.3 | 89.4 | 91.1 | 91.4 | 93.0 | 95.4 | 96.3 | 99.7 | 105.6 | 115.7 | 118.6 | 117.5 | 109.7 | 152.6 |
| 800 | 91.8 | 90.4 | 92.7 | 92.9 | 94.0 | 96.4 | 96.3 | 101.2 | 107.2 | 117.2 | 120.1 | 116.8 | 108.4 | 153.4 |
| 1000 | 95.4 | 94.7 | 96.2 | 96.0 | 95.9 | 98.0 | 99.4 | 102.8 | 108.7 | 117.8 | 120.7 | 116.1 | 106.3 | 153.9 |
| 1250 | 95.3 | 96.8 | 97.6 | 98.4 | 99.7 | 100.8 | 100.7 | 104.1 | 109.3 | 116.9 | 122.0 | 115.7 | 104.9 | 154.4 |
| 1600 | 103.1 | 99.0 | 98.0 | 97.5 | 98.6 | 101.7 | 102.1 | 105.0 | 109.7 | 117.1 | 122.5 | 114.5 | 104.7 | 154.7 |
| 2000 | 102.5 | 104.0 | 103.3 | 101.1 | 97.4 | 99.0 | 101.4 | 104.6 | 110.3 | 117.4 | 120.6 | 113.1 | 103.8 | 153.7 |
| 2500 | 101.7 | 103.2 | 104.2 | 104.5 | 102.8 | 100.8 | 102.3 | 105.0 | 109.7 | 117.3 | 119.0 | 112.0 | 102.7 | 153.0 |
| 3150 | 99.2 | 100.8 | 101.3 | 102.5 | 103.9 | 105.0 | 103.4 | 105.5 | 110.5 | 115.4 | 117.1 | 113.0 | 100.8 | 151.7 |
| 4000 | 97.3 | 97.9 | 99.7 | 99.9 | 101.2 | 103.9 | 104.2 | 105.2 | 108.9 | 114.6 | 115.0 | 107.9 | 98.9 | 150.4 |
| 5000 | 97.5 | 97.9 | 98.4 | 98.4 | 100.2 | 102.3 | 104.0 | 105.9 | 109.2 | 114.3 | 114.0 | 106.4 | 97.8 | 150.0 |
| 6300 | 96.7 | 97.1 | 98.7 | 98.4 | 102.0 | 103.2 | 105.6 | 109.0 | 113.3 | 112.1 | 104.8 | 97.5 | 149.2 | |
| 8000 | 96.6 | 97.5 | 98.2 | 98.7 | 99.3 | 101.4 | 102.2 | 104.6 | 108.6 | 111.8 | 110.2 | 103.3 | 96.1 | 148.4 |
| 10000 | 95.5 | 97.2 | 98.9 | 98.2 | 99.5 | 101.9 | 101.6 | 104.9 | 107.7 | 110.9 | 109.1 | 102.9 | 95.2 | 148.2 |
| 12500 | 93.5 | 95.3 | 97.2 | 97.0 | 98.7 | 100.6 | 100.8 | 103.0 | 105.4 | 108.6 | 106.6 | 101.1 | 93.5 | 147.1 |
| 16000 | 92.7 | 94.7 | 96.8 | 97.0 | 99.1 | 100.1 | 98.8 | 101.3 | 103.6 | 107.7 | 104.8 | 99.5 | 92.9 | 147.2 |
| 20000 | 88.1 | 93.0 | 94.0 | 95.0 | 98.5 | 98.5 | 98.5 | 98.5 | 101.2 | 104.5 | 102.0 | 96.8 | 90.7 | 146.5 |
| 25000 | 87.6 | 88.9 | 92.0 | 91.4 | 96.5 | 96.1 | 93.9 | 93.7 | 98.6 | 99.5 | 97.8 | 92.8 | 89.4 | 145.3 |
| 31500 | 85.4 | 85.3 | 89.0 | 90.8 | 91.3 | 91.3 | 90.2 | 91.3 | 95.6 | 97.9 | 94.4 | 87.7 | 83.7 | 145.4 |
| 40000 | 80.8 | 79.8 | 84.3 | 84.9 | 89.6 | 89.5 | 84.9 | 86.2 | 90.1 | 92.0 | 88.6 | 82.3 | 79.4 | 144.6 |
| 50000 | 73.4 | 74.0 | 77.0 | 78.5 | 81.4 | 81.6 | 80.6 | 79.4 | 85.0 | 86.0 | 82.7 | 77.0 | 73.9 | 142.7 |
| 63000 | 67.8 | 67.8 | 70.4 | 71.9 | 72.4 | 73.1 | 75.1 | 72.8 | 80.1 | 79.1 | 76.0 | 70.8 | 67.6 | 141.5 |
| 80000 | 61.6 | 60.7 | 64.2 | 66.7 | 65.8 | 67.0 | 67.1 | 66.6 | 72.9 | 73.1 | 71.3 | 61.8 | 58.9 | 141.9 |
| QASPL | 110.1 | 110.6 | 111.4 | 111.3 | 112.0 | 113.5 | 113.8 | 116.3 | 120.6 | 127.5 | 130.4 | 128.6 | 120.7 | 164.6 |

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TEST DATE 02-27-78 TAPE NO. N299 ALPHA S859 TAPB 32.00
LOCATION C41 ANECH CH AERO. RDG. ADH130 PAMB 29.5900 RELNUM 60.00

(JDEL TEST POINT ACUSTIC RANGE 154.7 SQ CH (23.99 SQ IN) - MODEL 99.36 M/SEC (326.0 FPS)
7200 7203 12.2 M (40.0 FT) ARC

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X72030

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 10. | 50. | 60. | 70. | 80. | 90. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | | |
| 250 | 89.8 | 92.1 | 91.2 | 90.5 | 90.0 | 90.0 | 90.8 | 91.9 | 92.4 | 97.0 | 104.1 | 107.7 | 111.8 | 111.4 | 144.8 |
| 315 | 89.6 | 92.1 | 91.2 | 90.4 | 90.7 | 92.3 | 91.1 | 92.6 | 99.2 | 109.3 | 112.1 | 114.9 | 112.6 | 148.0 | |
| 400 | 91.3 | 91.8 | 91.1 | 90.8 | 91.2 | 92.4 | 92.9 | 93.8 | 101.7 | 111.9 | 115.5 | 117.0 | 113.7 | 150.4 | |
| 500 | 92.7 | 92.2 | 92.7 | 92.6 | 92.7 | 94.2 | 94.0 | 95.6 | 104.1 | 113.9 | 117.3 | 117.6 | 113.6 | 151.7 | |
| 630 | 93.6 | 93.4 | 94.2 | 94.2 | 94.5 | 95.6 | 95.6 | 98.0 | 105.8 | 115.7 | 118.9 | 117.9 | 114.6 | 152.9 | |
| 800 | 94.5 | 94.5 | 95.2 | 95.7 | 95.6 | 96.7 | 97.5 | 99.4 | 107.6 | 116.5 | 119.9 | 118.1 | 114.4 | 153.7 | |
| 1000 | 97.7 | 95.3 | 96.6 | 98.3 | 97.2 | 98.4 | 98.6 | 101.0 | 108.2 | 115.5 | 121.1 | 117.6 | 112.9 | 153.9 | |
| 1250 | 99.8 | 98.5 | 99.3 | 101.3 | 101.5 | 101.4 | 100.1 | 102.4 | 108.7 | 115.7 | 121.6 | 116.3 | 112.7 | 154.2 | |
| 1600 | 101.4 | 102.0 | 102.0 | 99.9 | 100.1 | 102.4 | 101.6 | 103.4 | 109.4 | 116.2 | 119.9 | 115.0 | 111.9 | 153.3 | |
| 2000 | 108.5 | 103.4 | 101.4 | 103.6 | 99.0 | 99.9 | 101.1 | 103.1 | 109.1 | 116.4 | 118.5 | 114.1 | 111.0 | 152.7 | |
| 2500 | 108.0 | 108.6 | 106.8 | 106.9 | 104.5 | 102.0 | 102.2 | 103.8 | 110.2 | 114.8 | 116.8 | 112.4 | 109.2 | 152.1 | |
| 3150 | 105.7 | 106.7 | 107.2 | 106.0 | 106.3 | 106.3 | 103.5 | 104.6 | 109.0 | 114.6 | 115.1 | 110.6 | 107.4 | 151.4 | |
| 4000 | 105.3 | 106.0 | 105.6 | 103.6 | 103.9 | 105.6 | 104.8 | 104.6 | 109.8 | 114.6 | 114.6 | 109.6 | 106.8 | 151.1 | |
| 5000 | 103.3 | 103.2 | 104.1 | 102.6 | 103.3 | 104.5 | 104.9 | 105.8 | 110.2 | 114.1 | 113.1 | 108.3 | 106.6 | 150.5 | |
| 6300 | 103.5 | 103.2 | 103.0 | 102.6 | 102.8 | 104.6 | 104.7 | 106.1 | 110.0 | 112.7 | 111.4 | 106.9 | 105.3 | 149.9 | |
| 8000 | 102.5 | 102.4 | 103.3 | 103.2 | 103.0 | 104.4 | 103.9 | 105.4 | 109.2 | 112.0 | 110.5 | 106.6 | 104.6 | 149.7 | |
| 10000 | 102.2 | 102.7 | 102.7 | 102.6 | 103.2 | 104.9 | 103.2 | 105.4 | 107.2 | 110.0 | 108.3 | 106.1 | 103.2 | 149.0 | |
| 12500 | 100.8 | 102.1 | 103.2 | 101.4 | 102.5 | 103.6 | 102.5 | 103.5 | 106.0 | 109.6 | 107.0 | 104.0 | 103.1 | 149.0 | |
| 16000 | 98.3 | 99.6 | 101.0 | 101.5 | 102.9 | 103.1 | 100.5 | 101.8 | 104.2 | 107.1 | 104.8 | 102.3 | 102.3 | 148.7 | |
| 20000 | 97.1 | 98.7 | 100.2 | 100.4 | 102.6 | 101.8 | 98.4 | 99.3 | 102.9 | 103.6 | 102.4 | 100.3 | 102.9 | 148.8 | |
| 25000 | 94.1 | 98.1 | 98.1 | 96.8 | 100.6 | 99.1 | 96.3 | 95.1 | 99.8 | 101.6 | 98.4 | 94.1 | 95.8 | 148.3 | |
| 31500 | 92.8 | 93.3 | 95.3 | 95.3 | 95.0 | 94.3 | 92.1 | 92.0 | 95.9 | 97.5 | 94.6 | 91.1 | 94.7 | 147.6 | |
| 40000 | 87.6 | 87.0 | 90.2 | 90.3 | 93.8 | 92.5 | 87.2 | 87.5 | 91.1 | 91.7 | 88.9 | 85.9 | 88.9 | 147.4 | |
| 50000 | 84.7 | 83.0 | 86.4 | 83.9 | 85.6 | 84.6 | 82.9 | 80.6 | 87.1 | 85.7 | 83.1 | 80.6 | 83.8 | 146.0 | |
| 63000 | 76.4 | 76.2 | 78.1 | 76.4 | 76.2 | 76.1 | 77.4 | 74.0 | 80.8 | 80.6 | 79.0 | 71.9 | 74.7 | 144.3 | |
| 80000 | 67.2 | 66.7 | 68.8 | 71.2 | 69.3 | 70.0 | 69.0 | 67.3 | 71.0 | 70.8 | 69.1 | 62.1 | 64.8 | 142.8 | |
| GASPL | 115.5 | 115.3 | 115.2 | 114.8 | 114.8 | 115.4 | 114.5 | 115.8 | 120.7 | 126.7 | 129.5 | 127.0 | 123.8 | 164.8 | |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 326.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | SB59 | TAMB | 32.00 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH130 | PAMB | 29.5900 | RELHUM | 60.00 |

| MODEL | TEST POINT | ACUSTIC RANGE | 12.2 M (40.0 FT) | ARC | 154.7 SQ CM (23.99 SQ IN) | MODEL | 99.36 M/SEC (326.0 FPS) |
|-------|------------|---------------|-------------------|-----|----------------------------|-------|--------------------------|
| 7200 | 7203 | | | | | | |

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X72031

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 69.5 | 71.5 | 71.9 | 72.3 | 73.1 | 74.4 | 74.6 | 75.4 | 82.5 | 91.6 | 93.7 | 93.0 | 86.4 | 168.1 |
| 60 | 70.9 | 72.0 | 73.5 | 74.1 | 74.8 | 76.3 | 76.0 | 77.2 | 84.9 | 93.6 | 95.4 | 93.6 | 86.2 | 169.3 |
| 80 | 71.8 | 73.1 | 75.0 | 75.7 | 76.4 | 77.7 | 77.4 | 79.5 | 86.6 | 95.3 | 97.1 | 93.8 | 87.1 | 170.6 |
| 100 | 72.5 | 74.1 | 75.9 | 77.2 | 77.5 | 78.7 | 79.4 | 80.9 | 88.3 | 96.1 | 98.0 | 93.9 | 86.8 | 171.3 |
| 125 | 75.6 | 74.9 | 77.2 | 79.6 | 79.0 | 80.3 | 80.4 | 82.4 | 88.8 | 95.1 | 99.1 | 93.2 | 85.0 | 171.8 |
| 160 | 77.5 | 77.9 | 79.8 | 82.6 | 83.1 | 83.2 | 81.7 | 83.6 | 89.2 | 95.1 | 99.4 | 91.7 | 84.5 | 171.8 |
| 200 | 78.9 | 81.2 | 82.3 | 81.0 | 81.6 | 84.0 | 83.1 | 84.4 | 89.7 | 95.4 | 97.4 | 80.1 | 83.2 | 170.9 |
| 250 | 85.7 | 82.3 | 81.5 | 84.5 | 80.3 | 81.3 | 82.4 | 84.0 | 89.2 | 95.3 | 95.7 | 88.8 | 81.6 | 170.4 |
| 315 | 84.8 | 87.2 | 86.9 | 87.5 | 85.6 | 83.2 | 83.2 | 84.3 | 90.0 | 93.3 | 93.6 | 86.6 | 79.1 | 169.8 |
| 400 | 81.9 | 84.9 | 86.6 | 86.3 | 87.0 | 87.2 | 84.2 | 84.9 | 88.4 | 92.7 | 91.3 | 84.0 | 76.2 | 169.1 |
| 500 | 81.1 | 83.8 | 84.7 | 83.6 | 84.4 | 86.2 | 85.2 | 84.6 | 88.9 | 92.4 | 90.4 | 82.4 | 74.7 | 168.8 |
| 630 | 78.6 | 80.6 | 82.9 | 82.0 | 83.4 | 84.8 | 85.1 | 85.5 | 89.0 | 91.5 | 88.4 | 80.4 | 73.4 | 168.2 |
| 800 | 78.3 | 80.2 | 81.4 | 82.0 | 82.8 | 84.8 | 84.6 | 85.5 | 88.4 | 89.7 | 86.2 | 78.4 | 71.0 | 167.6 |
| 1000 | 76.9 | 79.1 | 81.5 | 82.4 | 82.8 | 84.4 | 83.7 | 84.6 | 87.4 | 88.7 | 84.8 | 77.4 | 69.1 | 167.3 |
| 1250 | 76.0 | 79.1 | 80.7 | 81.7 | 82.9 | 84.7 | 82.9 | 84.4 | 85.2 | 86.4 | 82.1 | 75.1 | 65.3 | 166.7 |
| 1600 | 73.8 | 77.8 | 80.7 | 80.2 | 81.8 | 83.2 | 81.9 | 82.2 | 83.5 | 85.4 | 80.0 | 72.6 | 63.8 | 166.6 |
| 2000 | 70.3 | 74.8 | 78.2 | 80.0 | 82.1 | 82.8 | 79.8 | 80.3 | 81.3 | 82.2 | 76.8 | 69.2 | 60.0 | 166.3 |
| 2500 | 67.4 | 72.6 | 76.5 | 78.2 | 81.3 | 80.7 | 77.1 | 77.2 | 79.2 | 77.6 | 72.7 | 64.4 | 55.7 | 166.4 |
| 3150 | 61.0 | 69.6 | 72.6 | 73.1 | 77.9 | 76.7 | 73.6 | 71.4 | 74.2 | 73.1 | 65.3 | 53.3 | 40.2 | 166.0 |
| 4000 | 53.4 | 60.1 | 65.9 | 68.2 | 69.3 | 69.0 | 66.4 | 64.9 | 66.5 | 64.3 | 55.3 | 41.4 | 24.6 | 165.3 |
| 5000 | 38.5 | 46.2 | 54.6 | 57.8 | 63.1 | 62.4 | 58.5 | 55.1 | 55.4 | 50.9 | 39.7 | 22.5 | 165.1 | |
| 6300 | 17.8 | 28.0 | 38.8 | 40.7 | 44.8 | 44.6 | 42.1 | 37.4 | 39.4 | 30.7 | 16.1 | | 163.7 | |
| 8000 | | | 9.1 | 13.9 | 17.3 | 18.3 | 18.5 | 11.6 | 11.8 | 0.8 | | | 162.0 | |
| 10000 | | | | | | | | | | | | | 160.4 | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GASPL 91.6 93.1 94.2 94.7 95.0 95.8 94.8 95.7 100.1 105.4 106.9 102.0 94.8 162.3
 PNL 97.2 99.8 101.4 102.4 104.2 104.4 102.5 103.0 106.0 109.5 109.1 102.4 94.9
 PNL 97.8 100.4 102.2 102.9 105.6 105.6 103.0 103.0 106.6 110.1 109.1 102.4 96.1

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 8859 TAMB 32.00
 LOCATION C41 ANECH CH AERO. RDG. ADH130 PAMB 29.5900 RELHUM 60.00

MODEL TEST POINT ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 99.36 M/SEC (326.0 FPS)
 7200

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X72040
 BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 83.3 | 85.9 | 85.6 | 87.2 | 87.3 | 89.7 | 92.1 | 94.6 | 99.5 | 106.4 | 110.0 | 113.5 | 112.6 | 146.5 |
| 315 | 85.3 | 86.8 | 86.6 | 88.9 | 88.7 | 91.4 | 91.5 | 94.4 | 101.4 | 108.5 | 111.6 | 114.6 | 112.2 | 147.6 |
| 400 | 86.9 | 87.1 | 88.0 | 87.7 | 89.0 | 91.9 | 92.8 | 95.0 | 102.4 | 111.5 | 114.9 | 116.8 | 110.8 | 149.5 |
| 500 | 86.7 | 87.7 | 89.7 | 89.5 | 90.6 | 92.7 | 94.1 | 96.8 | 104.3 | 113.1 | 116.5 | 118.7 | 107.6 | 150.3 |
| 630 | 88.1 | 89.3 | 90.6 | 90.4 | 96.0 | 94.4 | 96.7 | 99.2 | 106.9 | 115.2 | 118.1 | 114.8 | 105.4 | 151.5 |
| 800 | 91.1 | 89.5 | 91.1 | 92.2 | 93.0 | 95.6 | 97.3 | 100.9 | 108.4 | 116.5 | 119.1 | 114.0 | 103.7 | 152.3 |
| 1000 | 92.9 | 92.5 | 94.3 | 94.5 | 94.9 | 97.2 | 98.4 | 102.0 | 110.3 | 116.8 | 119.5 | 112.4 | 102.5 | 152.6 |
| 1250 | 94.6 | 96.6 | 97.4 | 95.9 | 97.2 | 99.4 | 99.2 | 103.4 | 110.8 | 116.5 | 121.1 | 112.5 | 102.2 | 153.5 |
| 1600 | 101.9 | 99.5 | 97.5 | 96.8 | 96.6 | 99.8 | 100.9 | 104.6 | 111.2 | 116.9 | 120.8 | 111.5 | 103.0 | 153.5 |
| 2000 | 101.3 | 102.4 | 102.6 | 100.1 | 97.5 | 98.3 | 100.0 | 104.6 | 111.5 | 117.2 | 119.4 | 110.1 | 102.4 | 153.0 |
| 2500 | 100.5 | 101.3 | 102.8 | 103.1 | 102.7 | 100.0 | 101.7 | 104.8 | 111.2 | 117.2 | 117.9 | 110.1 | 101.8 | 152.4 |
| 3150 | 97.3 | 98.4 | 99.4 | 101.2 | 102.5 | 104.3 | 102.2 | 105.4 | 112.1 | 115.8 | 116.7 | 108.9 | 100.6 | 151.7 |
| 4000 | 95.4 | 96.3 | 97.8 | 98.3 | 99.9 | 103.0 | 103.1 | 105.5 | 111.5 | 114.7 | 114.3 | 106.7 | 98.5 | 150.4 |
| 5000 | 95.9 | 96.7 | 96.5 | 97.5 | 99.3 | 101.2 | 103.8 | 105.7 | 111.4 | 114.7 | 113.3 | 105.2 | 97.2 | 150.1 |
| 6300 | 95.7 | 96.4 | 97.4 | 96.8 | 98.1 | 101.4 | 102.4 | 105.8 | 110.8 | 113.1 | 111.1 | 103.6 | 96.5 | 149.1 |
| 8000 | 95.4 | 96.9 | 97.0 | 97.3 | 98.4 | 100.5 | 101.8 | 105.2 | 110.4 | 111.8 | 110.1 | 102.2 | 95.5 | 148.6 |
| 10000 | 94.9 | 96.3 | 97.7 | 97.0 | 98.6 | 100.8 | 100.7 | 104.7 | 108.9 | 110.7 | 108.3 | 101.3 | 94.2 | 148.1 |
| 12500 | 93.0 | 94.9 | 95.6 | 96.4 | 97.9 | 100.1 | 99.3 | 102.7 | 106.4 | 108.5 | 105.6 | 99.1 | 93.3 | 146.7 |
| 16000 | 92.6 | 94.6 | 96.0 | 96.3 | 98.2 | 99.4 | 98.4 | 101.3 | 104.5 | 107.0 | 103.6 | 97.5 | 92.2 | 146.7 |
| 20000 | 87.6 | 92.2 | 94.0 | 93.8 | 97.3 | 98.2 | 95.8 | 98.2 | 101.1 | 103.2 | 100.0 | 94.9 | 90.7 | 145.5 |
| 25000 | 87.1 | 88.3 | 91.4 | 91.4 | 95.2 | 95.6 | 93.2 | 93.7 | 98.6 | 98.5 | 95.7 | 91.9 | 88.7 | 144.6 |
| 31500 | 84.9 | 85.4 | 88.8 | 89.4 | 90.2 | 91.0 | 89.6 | 90.4 | 94.1 | 96.0 | 92.7 | 86.9 | 83.5 | 144.2 |
| 40000 | 79.9 | 79.8 | 83.1 | 84.5 | 88.5 | 88.9 | 84.7 | 85.3 | 89.1 | 89.5 | 87.7 | 81.5 | 79.1 | 143.5 |
| 50000 | 73.0 | 73.4 | 75.9 | 77.8 | 80.0 | 81.2 | 79.7 | 78.9 | 85.0 | 83.0 | 81.2 | 76.4 | 72.8 | 141.6 |
| 63000 | 67.2 | 67.2 | 69.1 | 71.9 | 71.3 | 72.9 | 74.0 | 72.1 | 80.5 | 76.8 | 75.7 | 70.4 | 66.9 | 140.9 |
| 80000 | 60.9 | 60.3 | 64.1 | 66.2 | 64.4 | 67.1 | 66.3 | 66.1 | 73.2 | 72.6 | 69.4 | 61.3 | 58.5 | 141.4 |
| GASPL | 108.9 | 109.4 | 110.2 | 110.1 | 111.0 | 112.6 | 112.9 | 116.1 | 122.2 | 127.2 | 129.4 | 124.4 | 118.5 | 163.9 |

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TEST DATE 02-27-78
 LOCATION C41 ANECH CH
 TAPE NO. N299
 AERO. RDG. ADH991
 ALPHA SB59
 PAMB 29.5700
 TAMB 29.30
 RELHUM 44.80

MODEL TEST POINT 7204
 ACUSTIC RANGE 12.2 M (40.0 FT) ARC
 SIZE 154.7 SQ CM (23.99 SQ IN) - MODEL 117.96 M/SEC (387.0 FPS)
 FREE-JET SPEED

07/17/79 10.180

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X72040

ANGLES MEASURED FROM INLET, DEGREES

FREQ 50 60 70 80 90 100 110 120 130 140 150 160 PWL

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | 90.3 | 91.7 | 90.1 | 90.2 | 88.8 | 89.7 | 90.3 | 91.1 | 98.0 | 104.2 | 106.9 | 110.2 | 109.7 | 143.7 |
| 60 | 90.3 | 91.7 | 90.1 | 90.2 | 90.5 | 91.6 | 90.2 | 91.7 | 100.5 | 109.0 | 112.1 | 113.9 | 111.3 | 147.4 |
| 80 | 92.7 | 92.0 | 91.3 | 90.2 | 90.7 | 92.1 | 92.0 | 93.2 | 102.3 | 110.7 | 114.2 | 114.9 | 110.3 | 148.7 |
| 100 | 93.2 | 92.6 | 92.3 | 90.7 | 92.4 | 93.0 | 93.2 | 94.8 | 104.8 | 112.7 | 115.6 | 114.6 | 110.0 | 149.8 |
| 125 | 94.1 | 93.9 | 94.5 | 92.9 | 94.7 | 94.7 | 94.8 | 96.9 | 106.7 | 114.4 | 117.4 | 116.1 | 110.8 | 151.2 |
| 160 | 95.5 | 95.3 | 95.4 | 93.8 | 94.9 | 96.1 | 96.4 | 98.8 | 108.9 | 115.2 | 118.4 | 114.6 | 112.1 | 151.9 |
| 200 | 98.0 | 95.5 | 95.8 | 95.5 | 96.8 | 97.8 | 97.8 | 100.0 | 109.5 | 114.9 | 120.0 | 114.7 | 111.6 | 152.8 |
| 250 | 99.4 | 98.1 | 98.8 | 97.8 | 99.2 | 100.1 | 98.6 | 101.4 | 110.2 | 115.6 | 120.1 | 114.1 | 112.9 | 153.0 |
| 315 | 100.6 | 101.9 | 101.7 | 99.1 | 98.5 | 100.7 | 100.4 | 102.8 | 110.8 | 116.1 | 118.9 | 112.8 | 112.3 | 152.6 |
| 400 | 106.6 | 105.1 | 101.8 | 99.8 | 99.5 | 99.5 | 99.8 | 103.2 | 110.8 | 116.5 | 117.7 | 113.2 | 112.3 | 152.6 |
| 500 | 107.8 | 107.7 | 106.8 | 103.2 | 105.0 | 101.5 | 101.8 | 103.7 | 112.1 | 115.6 | 117.0 | 112.5 | 111.6 | 152.5 |
| 630 | 105.6 | 105.9 | 106.8 | 106.3 | 105.6 | 106.2 | 102.7 | 104.7 | 112.0 | 115.0 | 116.0 | 110.4 | 109.1 | 151.8 |
| 800 | 104.6 | 104.8 | 104.8 | 105.4 | 103.4 | 105.4 | 104.1 | 105.3 | 112.2 | 115.0 | 113.9 | 108.7 | 107.4 | 151.4 |
| 1000 | 102.7 | 102.8 | 103.3 | 102.8 | 103.3 | 104.2 | 105.3 | 105.8 | 111.7 | 113.5 | 111.8 | 107.2 | 106.8 | 150.3 |
| 1250 | 103.0 | 102.2 | 102.2 | 102.1 | 104.4 | 103.9 | 105.9 | 111.4 | 112.4 | 110.9 | 106.0 | 105.9 | 149.8 | |
| 1600 | 102.7 | 102.7 | 102.9 | 101.4 | 102.4 | 103.5 | 103.3 | 105.3 | 110.1 | 111.4 | 109.3 | 105.2 | 104.8 | 149.3 |
| 2000 | 102.3 | 103.0 | 102.3 | 101.7 | 102.6 | 103.8 | 102.2 | 104.8 | 107.9 | 109.5 | 107.0 | 103.4 | 104.6 | 148.6 |
| 2500 | 101.5 | 102.2 | 102.8 | 101.2 | 101.9 | 103.1 | 100.8 | 102.8 | 106.7 | 108.8 | 105.8 | 102.9 | 104.8 | 148.5 |
| 3150 | 99.0 | 100.3 | 100.2 | 100.0 | 102.2 | 102.4 | 100.1 | 101.6 | 104.5 | 106.4 | 103.8 | 102.1 | 105.1 | 148.3 |
| 4000 | 98.2 | 99.6 | 100.1 | 99.5 | 101.9 | 101.2 | 98.0 | 99.2 | 103.7 | 103.4 | 101.2 | 100.4 | 104.1 | 148.7 |
| 5000 | 95.3 | 98.8 | 99.2 | 97.5 | 99.8 | 98.6 | 95.8 | 95.4 | 99.0 | 100.6 | 98.0 | 95.5 | 99.3 | 148.2 |
| 6300 | 94.1 | 94.1 | 95.8 | 94.3 | 94.2 | 94.0 | 91.9 | 91.5 | 95.9 | 96.3 | 95.0 | 91.9 | 96.5 | 147.5 |
| 8000 | 88.4 | 88.1 | 90.8 | 90.4 | 93.0 | 91.9 | 87.2 | 87.0 | 91.8 | 89.7 | 88.5 | 87.0 | 90.4 | 147.2 |
| 10000 | 85.7 | 84.4 | 86.2 | 86.2 | 84.5 | 84.2 | 82.1 | 80.4 | 87.8 | 83.9 | 83.4 | 81.5 | 85.3 | 146.2 |
| 12500 | 77.8 | 77.0 | 78.1 | 78.6 | 75.3 | 75.9 | 76.3 | 73.3 | 80.9 | 79.8 | 77.0 | 71.9 | 76.0 | 144.3 |
| 16000 | 67.8 | 67.1 | 68.2 | 70.1 | 68.4 | 70.1 | 68.2 | 66.5 | 71.1 | 70.0 | 67.2 | 62.1 | 66.2 | 142.3 |

OASPL 115.4 115.1 114.9 113.8 114.3 114.8 113.7 115.6 122.2 126.3 128.5 124.9 122.8 164.1

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 387.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 3859 TAMB 29.30
LOCATION C41 ANECH CH AERO. RDG. ADH991 PAMB 29.5700 RELHUM 44.80

MODEL TEST POINT 7204 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.96 M/SEC (387.0 FPS)
FREE-JET SPEED

ORIGINAL PAGE 19
OF POOR QUALITY

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X72041

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 70.9 | 71.7 | 72.1 | 71.7 | 72.6 | 74.2 | 74.0 | 74.7 | 83.1 | 90.5 | 92.4 | 90.9 | 83.0 | 166.4 |
| 60 | 71.4 | 72.3 | 73.1 | 72.2 | 74.4 | 76.1 | 76.1 | 76.3 | 85.6 | 92.4 | 94.0 | 90.6 | 82.6 | 167.5 |
| 80 | 72.2 | 73.6 | 75.3 | 74.4 | 79.8 | 76.6 | 76.7 | 78.4 | 87.4 | 94.1 | 95.6 | 91.0 | 83.3 | 168.8 |
| 100 | 73.5 | 75.2 | 76.2 | 75.2 | 76.8 | 78.1 | 78.2 | 80.2 | 89.6 | 94.8 | 96.5 | 90.4 | 84.4 | 169.6 |
| 125 | 75.9 | 75.0 | 76.4 | 76.9 | 78.6 | 79.6 | 79.3 | 81.3 | 90.1 | 94.4 | 98.0 | 90.4 | 83.8 | 170.4 |
| 150 | 77.1 | 77.4 | 79.2 | 79.0 | 80.9 | 81.9 | 80.2 | 82.7 | 90.7 | 94.9 | 97.8 | 89.5 | 84.6 | 170.7 |
| 200 | 78.1 | 81.1 | 82.0 | 80.2 | 80.0 | 82.4 | 81.9 | 83.9 | 91.1 | 95.3 | 96.4 | 87.9 | 83.6 | 170.3 |
| 250 | 85.8 | 84.0 | 81.9 | 80.7 | 80.8 | 81.0 | 81.1 | 84.0 | 90.9 | 95.4 | 94.9 | 87.9 | 82.9 | 170.2 |
| 315 | 84.6 | 86.3 | 86.6 | 83.8 | 86.1 | 82.7 | 82.8 | 84.3 | 91.9 | 94.1 | 93.8 | 86.6 | 81.4 | 170.2 |
| 400 | 81.9 | 84.1 | 86.2 | 86.5 | 86.3 | 87.1 | 83.8 | 84.9 | 91.5 | 93.1 | 91.3 | 83.9 | 77.9 | 169.5 |
| 500 | 80.4 | 82.5 | 83.9 | 85.3 | 83.8 | 86.0 | 84.6 | 85.3 | 91.3 | 92.8 | 89.7 | 81.5 | 75.3 | 169.0 |
| 630 | 78.0 | 80.1 | 82.1 | 82.4 | 83.5 | 84.5 | 85.5 | 85.5 | 90.4 | 90.8 | 87.1 | 79.3 | 73.6 | 167.9 |
| 800 | 77.8 | 79.2 | 80.6 | 81.6 | 82.0 | 84.6 | 83.8 | 85.3 | 89.9 | 89.4 | 85.7 | 77.4 | 71.6 | 167.5 |
| 1000 | 77.1 | 79.4 | 81.1 | 80.7 | 82.1 | 83.5 | 83.1 | 84.5 | 88.3 | 88.1 | 83.7 | 76.0 | 69.3 | 166.9 |
| 1250 | 76.1 | 79.4 | 80.3 | 80.8 | 82.3 | 83.6 | 81.8 | 83.9 | 85.9 | 85.8 | 80.8 | 73.4 | 67.6 | 166.2 |
| 1600 | 74.5 | 78.0 | 80.4 | 79.9 | 81.3 | 82.7 | 80.2 | 81.5 | 84.3 | 84.6 | 78.8 | 71.5 | 65.6 | 166.2 |
| 2000 | 71.1 | 75.5 | 77.4 | 78.5 | 81.4 | 81.9 | 79.3 | 80.0 | 81.7 | 81.5 | 78.8 | 69.1 | 62.8 | 166.0 |
| 2500 | 68.4 | 73.5 | 76.4 | 77.3 | 80.5 | 80.1 | 76.7 | 77.0 | 80.0 | 77.4 | 71.4 | 64.6 | 56.9 | 166.3 |
| 3150 | 62.2 | 70.3 | 73.6 | 73.8 | 77.0 | 76.2 | 72.9 | 71.7 | 73.4 | 72.1 | 64.8 | 54.7 | 43.7 | 165.9 |
| 4000 | 54.7 | 60.9 | 66.4 | 67.3 | 68.5 | 68.7 | 66.2 | 64.4 | 66.5 | 63.0 | 55.6 | 42.2 | 26.4 | 165.2 |
| 5000 | 39.2 | 47.3 | 55.1 | 58.0 | 62.3 | 61.8 | 56.5 | 54.6 | 56.1 | 48.9 | 39.4 | 23.5 | | 164.9 |
| 6300 | 18.7 | 29.4 | 38.6 | 42.9 | 43.7 | 44.2 | 41.3 | 37.2 | 40.1 | 28.9 | 16.5 | | | 163.9 |
| 8000 | | | 9.1 | 16.1 | 16.3 | 18.2 | 17.4 | 10.9 | 11.9 | | | | | 161.9 |
| 10000 | | | | | | | | | | | | | | 159.9 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GASPL 81.5 92.6 93.8 93.6 94.5 95.2 94.1 95.5 101.7 105.0 105.0 99.5 93.3 161.7
 PNLT 97.3 99.6 101.1 101.4 103.6 103.8 101.8 102.7 107.5 108.3 108.2 100.9 95.0
 PNLT 98.1 99.6 101.8 102.1 104.9 105.0 101.8 102.7 108.2 109.3 108.2 100.9 95.0

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 9859 TAMB 29.30
 LOCATION C41 ANECH CH AERO. RDG. ADH991 PAMB 29.5700 RELNUM 44.80

MODEL TEST POINT 7204 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 117.96 M/SEC (387.0 FPS)
 FREE-JET SPEED

07/19/79 19.662

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X72050
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

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FREE-JET SPEED
M/SEC (0. FPS)

SIZE
23.99 SQ IN) - MODEL

154.7 SQ CM (

ACQUSTIC RANGE
12.2 M (40.0 FT) ARC

MODEL TEST POINT
7205

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FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X72050

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | | | | | | | | | | | | | | |
| 315 | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | | |
| 630 | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | |
| 1000 | | | | | | | | | | | | | | |
| 1250 | | | | | | | | | | | | | | |
| 1600 | | | | | | | | | | | | | | |
| 2000 | | | | | | | | | | | | | | |
| 2500 | | | | | | | | | | | | | | |
| 3150 | | | | | | | | | | | | | | |
| 4000 | | | | | | | | | | | | | | |
| 5000 | | | | | | | | | | | | | | |
| 6300 | | | | | | | | | | | | | | |
| 8000 | | | | | | | | | | | | | | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |
| CASPL | 109.8 | 111.7 | 112.0 | 112.1 | 113.3 | 114.7 | 115.7 | 118.3 | 124.7 | 129.6 | 130.6 | 129.6 | 125.1 | 166.1 |

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MODEL/FULL SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES
INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAMB 27.88
LOCATION C41 ANECH CH AERO. RDG. ADH070 PAMB 29.2940 RELHUM 25.00

MODEL TEST POINT ACOUSTIC RANGE SIZE FREE-JET SPEED
7200 7205 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. M/SEC (0. FPS)

07/19/79 10.602

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F. 70 PERCENT R.H. STD. DAY. SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X72051

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 68.4 | 72.2 | 73.3 | 73.8 | 76.0 | 78.3 | 79.5 | 80.8 | 88.0 | 94.8 | 95.6 | 94.4 | 87.9 | 170.1 |
| 63 | 69.4 | 73.3 | 75.1 | 75.1 | 77.4 | 79.9 | 80.9 | 82.1 | 89.6 | 96.6 | 97.2 | 94.9 | 88.0 | 171.4 |
| 80 | 70.6 | 74.8 | 75.9 | 76.7 | 80.7 | 82.2 | 84.2 | 81.9 | 97.9 | 98.3 | 95.2 | 88.5 | 172.4 | |
| 100 | 75.5 | 75.3 | 77.4 | 78.9 | 79.7 | 81.7 | 83.4 | 85.4 | 93.4 | 98.4 | 99.2 | 95.7 | 87.9 | 173.2 |
| 125 | 79.7 | 82.1 | 83.7 | 82.7 | 82.2 | 83.2 | 84.5 | 86.7 | 94.2 | 98.7 | 94.1 | 88.5 | 172.9 | |
| 160 | 74.9 | 80.6 | 82.0 | 83.2 | 85.2 | 86.7 | 86.5 | 88.0 | 93.9 | 97.4 | 99.9 | 93.7 | 84.7 | 173.3 |
| 200 | 77.2 | 78.0 | 79.4 | 80.5 | 82.5 | 84.7 | 86.0 | 86.5 | 94.6 | 97.6 | 99.2 | 92.2 | 83.7 | 173.0 |
| 250 | 77.9 | 81.4 | 82.1 | 81.6 | 83.6 | 85.4 | 87.6 | 85.0 | 96.2 | 96.9 | 89.1 | 80.9 | 172.4 | |
| 315 | 75.3 | 78.9 | 80.2 | 81.5 | 82.5 | 84.0 | 86.0 | 88.0 | 93.8 | 98.1 | 94.7 | 87.7 | 78.9 | 171.8 |
| 400 | 76.1 | 80.5 | 80.1 | 81.2 | 82.0 | 83.5 | 85.7 | 88.2 | 94.0 | 96.9 | 92.7 | 86.1 | 76.7 | 171.2 |
| 500 | 75.1 | 78.7 | 80.0 | 80.4 | 81.5 | 82.7 | 84.9 | 87.6 | 92.7 | 95.1 | 90.7 | 83.2 | 74.0 | 170.0 |
| 630 | 73.4 | 77.3 | 79.5 | 80.9 | 81.5 | 82.8 | 85.0 | 87.4 | 91.4 | 94.0 | 89.1 | 81.6 | 72.0 | 169.5 |
| 800 | 70.9 | 75.9 | 78.9 | 79.9 | 81.4 | 83.7 | 83.7 | 86.4 | 90.6 | 92.0 | 85.9 | 79.6 | 70.5 | 168.5 |
| 1000 | 69.0 | 75.0 | 76.9 | 79.3 | 81.4 | 83.2 | 83.3 | 85.1 | 89.0 | 90.6 | 85.1 | 77.4 | 68.0 | 167.8 |
| 1250 | 66.6 | 73.7 | 76.2 | 78.0 | 80.9 | 83.3 | 82.7 | 84.4 | 87.7 | 89.0 | 82.7 | 76.1 | 65.1 | 167.3 |
| 1600 | 63.1 | 71.1 | 74.4 | 76.7 | 79.6 | 81.2 | 81.2 | 82.7 | 84.4 | 85.5 | 79.5 | 72.7 | 61.1 | 165.8 |
| 2000 | 60.3 | 69.4 | 72.6 | 75.4 | 78.6 | 80.3 | 79.3 | 80.7 | 81.6 | 83.7 | 76.2 | 69.0 | 56.9 | 165.6 |
| 2500 | 53.3 | 65.3 | 68.9 | 72.6 | 77.4 | 78.8 | 76.2 | 76.7 | 77.7 | 78.6 | 71.3 | 63.1 | 49.4 | 164.4 |
| 3150 | 49.2 | 59.4 | 64.6 | 67.0 | 73.4 | 74.4 | 71.6 | 70.6 | 73.3 | 71.4 | 63.7 | 54.2 | 38.3 | 163.1 |
| 4000 | 41.0 | 50.9 | 58.0 | 62.8 | 64.9 | 65.9 | 65.3 | 64.5 | 65.5 | 64.7 | 53.9 | 40.1 | 17.6 | 162.8 |
| 5000 | 28.7 | 38.3 | 47.2 | 52.1 | 58.1 | 58.9 | 54.7 | 53.9 | 54.2 | 51.8 | 39.6 | 21.9 | 182.2 | |
| 6300 | 2.0 | 17.4 | 27.0 | 34.7 | 39.6 | 41.4 | 39.3 | 36.3 | 36.5 | 31.9 | 15.8 | | 160.7 | |
| 8000 | | | | | | | | | | | | | 160.0 | |
| 10000 | | | | | | | | | | | | | 161.4 | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| OASPL | 66.6 | 90.1 | 91.5 | 92.3 | 93.9 | 95.4 | 96.4 | 98.5 | 104.4 | 108.3 | 108.0 | 103.4 | 95.9 | 183.5 |
| PNL | 90.3 | 95.3 | 96.9 | 98.8 | 101.7 | 103.2 | 102.9 | 104.5 | 109.5 | 112.3 | 110.2 | 103.8 | 95.0 | |
| PWL | 91.5 | 96.0 | 98.0 | 98.8 | 103.0 | 104.3 | 102.9 | 104.5 | 110.0 | 113.0 | 111.2 | 103.8 | 96.1 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-20-78 TAPE NO. N294 IALPHA SB59 TAMB 27.88
LOCATION C41 ANECH CH AERG. RDG. ADH079 PAMB 29.2940 RELHUM 28.00

MODEL TEST POINT 7205 ACOUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.0 SQ IN) - FULL SIZE 0. M/SEC (0. FPS) FREE-JET SPEED

59 80

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-150-FMODL X72060
BACKGROUND FJ150-AMODL X01500

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 85.3 | 89.3 | 88.8 | 89.6 | 90.2 | 92.3 | 94.7 | 96.4 | 99.6 | 106.4 | 111.0 | 116.5 | 114.6 | 148.1 |
| 315 | 87.1 | 88.2 | 88.4 | 89.2 | 91.3 | 93.7 | 94.6 | 97.0 | 101.7 | 109.7 | 113.4 | 116.8 | 115.0 | 149.6 |
| 400 | 86.4 | 89.2 | 90.2 | 90.2 | 92.1 | 93.7 | 95.3 | 97.5 | 103.5 | 112.6 | 116.4 | 118.6 | 114.8 | 151.7 |
| 500 | 89.7 | 90.3 | 91.6 | 91.6 | 93.2 | 95.0 | 96.4 | 98.6 | 104.8 | 115.1 | 118.5 | 119.4 | 113.8 | 153.0 |
| 630 | 90.6 | 91.4 | 93.1 | 93.2 | 95.3 | 96.6 | 97.6 | 100.9 | 106.6 | 115.9 | 119.6 | 119.3 | 114.2 | 153.6 |
| 800 | 94.6 | 92.1 | 94.4 | 94.9 | 95.8 | 97.9 | 99.3 | 102.7 | 108.4 | 116.7 | 120.6 | 119.8 | 113.9 | 154.4 |
| 1000 | 98.9 | 98.5 | 98.2 | 97.3 | 97.1 | 98.2 | 100.4 | 102.0 | 109.5 | 117.1 | 120.9 | 119.4 | 112.5 | 154.6 |
| 1250 | 95.8 | 98.6 | 100.6 | 101.4 | 100.7 | 102.1 | 102.0 | 104.9 | 110.1 | 116.4 | 121.8 | 119.5 | 110.4 | 155.0 |
| 1500 | 96.6 | 95.4 | 96.7 | 97.7 | 98.6 | 101.5 | 102.6 | 105.5 | 111.0 | 116.0 | 121.6 | 118.2 | 110.0 | 154.7 |
| 2000 | 97.6 | 96.8 | 96.3 | 97.1 | 97.7 | 100.0 | 101.9 | 103.6 | 111.3 | 117.9 | 120.8 | 115.6 | 106.6 | 154.2 |
| 2500 | 97.9 | 97.4 | 99.2 | 99.0 | 99.1 | 100.9 | 103.1 | 106.0 | 111.2 | 118.0 | 119.0 | 113.7 | 105.5 | 153.4 |
| 3150 | 100.2 | 100.5 | 99.0 | 98.8 | 98.9 | 101.5 | 103.3 | 107.0 | 111.6 | 117.4 | 117.6 | 112.0 | 103.2 | 152.7 |
| 4000 | 99.1 | 98.9 | 100.4 | 99.4 | 99.0 | 100.6 | 103.0 | 106.7 | 111.2 | 116.8 | 116.7 | 109.1 | 101.1 | 151.7 |
| 5000 | 98.0 | 97.9 | 99.4 | 99.9 | 100.4 | 101.6 | 103.2 | 106.6 | 110.9 | 116.1 | 114.7 | 107.8 | 99.3 | 151.2 |
| 6300 | 97.5 | 97.9 | 98.9 | 98.8 | 100.3 | 103.2 | 102.9 | 105.6 | 110.5 | 114.5 | 112.8 | 106.6 | 98.7 | 150.2 |
| 8000 | 97.6 | 98.0 | 98.7 | 98.5 | 100.3 | 102.2 | 102.5 | 105.6 | 109.9 | 113.5 | 111.5 | 105.6 | 97.4 | 149.7 |
| 10000 | 96.5 | 97.5 | 98.4 | 99.2 | 101.0 | 102.4 | 102.6 | 105.6 | 108.7 | 112.7 | 110.7 | 105.2 | 97.3 | 149.6 |
| 12500 | 94.1 | 96.4 | 97.5 | 98.5 | 101.4 | 100.9 | 103.8 | 106.7 | 110.5 | 108.5 | 103.1 | 95.6 | 148.5 | |
| 16000 | 92.6 | 95.3 | 97.4 | 97.9 | 99.5 | 101.0 | 100.2 | 102.6 | 105.0 | 109.3 | 106.5 | 101.3 | 94.0 | 148.6 |
| 20000 | 88.8 | 93.4 | 94.4 | 96.2 | 99.4 | 99.4 | 97.4 | 100.0 | 102.9 | 106.0 | 103.9 | 98.4 | 91.9 | 147.8 |
| 25000 | 87.0 | 89.9 | 92.9 | 92.6 | 97.1 | 97.0 | 94.8 | 95.2 | 100.5 | 101.2 | 98.7 | 89.5 | 146.7 | |
| 31500 | 85.1 | 86.1 | 89.8 | 91.8 | 92.0 | 92.0 | 91.2 | 92.8 | 96.6 | 100.1 | 96.1 | 89.9 | 84.7 | 146.8 |
| 40000 | 80.0 | 81.3 | 84.8 | 85.9 | 90.0 | 90.2 | 85.6 | 87.7 | 91.8 | 94.5 | 91.4 | 83.8 | 80.4 | 146.2 |
| 50000 | 73.3 | 74.8 | 77.7 | 79.8 | 82.1 | 82.9 | 81.6 | 80.6 | 87.0 | 89.1 | 85.3 | 79.3 | 74.6 | 144.6 |
| 63000 | 67.8 | 68.6 | 71.5 | 73.9 | 73.9 | 74.3 | 75.6 | 74.3 | 82.4 | 82.4 | 79.3 | 72.8 | 68.0 | 143.7 |
| 80000 | 61.8 | 62.5 | 66.0 | 68.8 | 67.1 | 69.3 | 68.3 | 68.4 | 76.9 | 78.0 | 75.5 | 64.2 | 59.9 | 145.4 |
| GASPL | 109.1 | 109.6 | 110.6 | 110.7 | 111.7 | 113.4 | 114.2 | 117.3 | 122.0 | 128.1 | 130.7 | 128.9 | 123.4 | 165.5 |

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TEST DATE 02-27-78 TAPE NO. N299 ALPHA 3859 TAMP 33.00
LOCATION C41 ANECH CH AERO. RDG. ADH132 PAMP 29.5900 RELHUM 61.00

MODEL TEST POINT 7206 ACUSTIC RANGE 12.2 M (40.0 FT). ARC 154.7 SQ CH (23.99 SQ IN) - MODEL 48.11 M/SE (148.0 FPS) / FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 40.0 FT. ARC

IDENTIFICATION - FJ-150-FMODL X72060

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PVL

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | 50.9 | 51.4 | 50.5 | 50.7 | 50.6 | 52.3 | 54.0 | 55.0 | 57.5 | 103.7 | 105.0 | 113.7 | 113.8 | 148.3 |
| 63 | 59.8 | 60.4 | 60.2 | 60.4 | 61.9 | 63.7 | 64.1 | 66.0 | 100.4 | 106.0 | 111.4 | 116.0 | 114.7 | 148.2 |
| 80 | 91.1 | 91.5 | 92.0 | 91.5 | 92.7 | 93.7 | 95.0 | 96.7 | 102.6 | 111.6 | 115.1 | 117.9 | 114.6 | 150.6 |
| 100 | 92.4 | 92.5 | 93.3 | 93.0 | 93.8 | 95.1 | 96.0 | 97.7 | 103.9 | 114.0 | 117.4 | 118.9 | 115.8 | 152.4 |
| 125 | 93.3 | 93.6 | 94.9 | 94.4 | 96.9 | 96.7 | 97.3 | 100.1 | 105.8 | 115.0 | 118.7 | 119.1 | 116.5 | 153.3 |
| 160 | 97.0 | 94.2 | 96.1 | 96.1 | 96.4 | 98.0 | 98.9 | 101.8 | 107.7 | 115.9 | 120.0 | 120.1 | 116.0 | 154.2 |
| 200 | 101.0 | 100.2 | 99.5 | 98.1 | 97.6 | 99.3 | 99.9 | 103.1 | 108.9 | 116.3 | 120.4 | 120.1 | 113.8 | 154.5 |
| 250 | 98.5 | 100.8 | 102.6 | 101.4 | 102.2 | 101.5 | 103.9 | 109.4 | 115.6 | 121.2 | 120.1 | 113.4 | 154.8 | |
| 315 | 99.3 | 97.7 | 98.5 | 99.0 | 99.3 | 101.6 | 102.4 | 104.6 | 110.3 | 115.2 | 121.1 | 118.8 | 109.5 | 154.3 |
| 400 | 99.5 | 100.3 | 99.5 | 98.0 | 98.2 | 100.2 | 101.5 | 104.9 | 110.5 | 116.9 | 120.0 | 115.8 | 108.3 | 153.5 |
| 500 | 100.1 | 99.4 | 100.8 | 100.1 | 99.8 | 101.1 | 102.7 | 105.1 | 110.5 | 117.1 | 118.1 | 113.9 | 106.2 | 152.7 |
| 630 | 102.1 | 102.1 | 100.3 | 99.7 | 99.5 | 101.7 | 103.0 | 106.2 | 111.1 | 116.5 | 117.0 | 112.3 | 104.2 | 152.1 |
| 800 | 100.9 | 100.6 | 101.8 | 100.5 | 99.7 | 101.2 | 102.8 | 105.9 | 110.6 | 116.0 | 115.0 | 109.5 | 102.5 | 151.1 |
| 1000 | 100.6 | 100.1 | 101.3 | 101.4 | 102.0 | 103.1 | 106.0 | 110.4 | 115.4 | 114.1 | 108.3 | 102.2 | 150.8 | |
| 1250 | 100.2 | 100.2 | 100.9 | 100.4 | 101.4 | 103.7 | 102.9 | 105.1 | 110.2 | 114.0 | 112.4 | 107.2 | 101.2 | 150.0 |
| 1600 | 100.3 | 100.4 | 100.7 | 100.1 | 101.4 | 102.9 | 102.6 | 105.2 | 109.7 | 113.2 | 111.2 | 106.8 | 101.5 | 149.7 |
| 2000 | 99.2 | 99.9 | 100.5 | 100.9 | 102.3 | 103.3 | 102.9 | 105.5 | 108.7 | 112.5 | 110.7 | 106.3 | 100.7 | 149.9 |
| 2500 | 96.8 | 98.8 | 99.7 | 100.4 | 101.0 | 102.5 | 101.5 | 103.9 | 107.0 | 110.6 | 108.7 | 104.5 | 99.8 | 149.0 |
| 3150 | 95.5 | 97.9 | 99.9 | 101.2 | 102.4 | 101.2 | 103.1 | 105.7 | 109.9 | 107.2 | 103.2 | 98.6 | 149.5 | |
| 4000 | 92.4 | 96.8 | 97.5 | 98.8 | 101.6 | 101.2 | 98.7 | 100.9 | 104.0 | 107.0 | 105.0 | 100.7 | 97.4 | 149.3 |
| 5000 | 90.6 | 93.4 | 96.1 | 95.5 | 99.7 | 98.2 | 96.7 | 96.6 | 102.2 | 102.8 | 101.5 | 97.7 | 93.3 | 148.7 |
| 6300 | 88.8 | 89.6 | 93.2 | 95.0 | 94.7 | 93.6 | 94.7 | 96.7 | 102.0 | 98.0 | 92.9 | 89.9 | 149.1 | |
| 8000 | 83.6 | 85.0 | 88.4 | 89.3 | 93.2 | 93.2 | 88.4 | 89.7 | 94.0 | 96.4 | 86.8 | 84.5 | 148.7 | |
| 10000 | 77.0 | 78.4 | 81.3 | 83.2 | 85.3 | 85.9 | 84.1 | 82.6 | 89.2 | 90.9 | 87.2 | 82.3 | 78.9 | 147.0 |
| 12500 | 71.4 | 72.2 | 75.0 | 77.3 | 77.1 | 77.3 | 78.2 | 76.3 | 84.5 | 84.3 | 81.2 | 75.8 | 72.2 | 146.1 |
| 16000 | 65.5 | 66.1 | 69.5 | 72.1 | 70.3 | 72.3 | 70.8 | 70.3 | 79.8 | 77.5 | 67.2 | 62.4 | 147.6 | |

GASPL 111.5 111.8 112.4 112.2 112.8 114.0 114.1 115.7 121.5 127.4 129.9 128.9 124.5 165.4

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 148.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 3859 TAMS 33.00
LOCATION C41 ANECH CH AERO. RDG. ADH132 PAMS 29.5900 RELHUM 61.00

MODEL TEST POINT 7206 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CH (23.99 SQ IN) - MODEL 45.11 M/SEC (148.0 FPS) FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-150-FMODL X72061

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PML |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 69.3 | 71.2 | 72.6 | 73.0 | 74.7 | 75.6 | 76.9 | 78.3 | 83.4 | 91.4 | 93.4 | 93.9 | 87.3 | 168.4 |
| 63 | 70.6 | 72.3 | 74.1 | 74.6 | 75.7 | 77.1 | 77.9 | 79.3 | 84.7 | 93.6 | 95.6 | 94.9 | 88.4 | 170.1 |
| 80 | 71.4 | 73.3 | 75.7 | 75.9 | 76.8 | 78.7 | 79.2 | 81.6 | 86.6 | 94.7 | 96.3 | 95.0 | 89.1 | 170.9 |
| 100 | 75.1 | 73.9 | 76.8 | 77.5 | 78.3 | 80.0 | 80.7 | 83.3 | 88.4 | 95.5 | 98.0 | 95.9 | 88.4 | 171.9 |
| 125 | 78.9 | 79.7 | 80.1 | 79.5 | 79.4 | 81.2 | 81.7 | 84.5 | 89.5 | 95.9 | 98.4 | 95.8 | 85.9 | 172.1 |
| 160 | 76.2 | 80.2 | 83.1 | 83.9 | 83.1 | 84.0 | 83.2 | 85.2 | 89.9 | 95.0 | 98.9 | 95.5 | 85.1 | 172.4 |
| 200 | 76.8 | 76.9 | 78.8 | 80.1 | 80.8 | 83.2 | 83.9 | 85.6 | 90.6 | 94.4 | 98.6 | 93.9 | 80.8 | 171.9 |
| 250 | 76.7 | 79.2 | 79.6 | 78.8 | 79.5 | 81.6 | 82.8 | 85.7 | 90.6 | 95.8 | 97.2 | 90.5 | 78.9 | 171.2 |
| 315 | 76.9 | 77.9 | 80.6 | 80.7 | 80.8 | 82.3 | 83.7 | 85.6 | 90.3 | 95.7 | 94.9 | 88.0 | 76.0 | 170.4 |
| 400 | 78.4 | 80.3 | 79.7 | 80.0 | 80.2 | 82.6 | 83.6 | 86.4 | 90.5 | 94.6 | 93.3 | 85.7 | 73.0 | 169.8 |
| 500 | 76.7 | 78.3 | 80.9 | 80.5 | 80.2 | 81.8 | 83.2 | 85.9 | 88.7 | 93.8 | 90.8 | 82.3 | 70.4 | 168.8 |
| 630 | 75.8 | 77.5 | 80.0 | 81.0 | 81.6 | 82.3 | 83.3 | 85.6 | 89.2 | 92.8 | 89.4 | 80.5 | 69.0 | 168.5 |
| 800 | 75.0 | 77.2 | 79.3 | 79.8 | 81.3 | 83.9 | 82.8 | 84.5 | 88.6 | 91.0 | 87.2 | 78.7 | 66.8 | 167.7 |
| 1000 | 74.6 | 77.1 | 78.9 | 79.3 | 81.2 | 82.9 | 82.4 | 84.5 | 87.9 | 89.9 | 85.6 | 77.2 | 66.0 | 167.4 |
| 1250 | 73.0 | 76.3 | 78.5 | 80.0 | 82.0 | 83.1 | 82.6 | 84.5 | 86.7 | 88.9 | 84.5 | 76.2 | 63.7 | 167.5 |
| 1600 | 69.7 | 74.6 | 77.3 | 79.1 | 80.4 | 82.1 | 80.9 | 82.6 | 84.6 | 86.4 | 81.7 | 73.1 | 60.5 | 166.7 |
| 2000 | 67.6 | 73.0 | 76.9 | 78.4 | 80.4 | 81.8 | 80.4 | 81.6 | 82.9 | 85.0 | 79.2 | 70.1 | 56.3 | 167.2 |
| 2500 | 62.6 | 70.7 | 73.8 | 76.6 | 80.2 | 80.1 | 77.4 | 78.7 | 80.3 | 80.9 | 75.2 | 64.9 | 50.2 | 166.9 |
| 3150 | 57.5 | 64.9 | 70.6 | 71.8 | 77.0 | 76.8 | 74.0 | 72.8 | 76.6 | 74.3 | 68.3 | 56.8 | 37.7 | 166.4 |
| 4000 | 49.4 | 56.4 | 63.8 | 68.0 | 69.3 | 69.5 | 67.9 | 67.7 | 69.3 | 68.8 | 58.7 | 43.1 | 19.8 | 166.8 |
| 5000 | 34.5 | 44.2 | 52.8 | 56.8 | 62.6 | 63.1 | 57.7 | 57.3 | 58.4 | 55.6 | 44.2 | 23.3 | | 166.4 |
| 6300 | 10.0 | 23.4 | 33.6 | 40.0 | 44.6 | 45.8 | 43.3 | 39.4 | 41.5 | 35.9 | 20.3 | | | 164.7 |
| 8000 | | | 6.0 | 14.9 | 18.2 | 19.6 | 19.3 | 13.8 | 15.5 | 4.4 | | | | 163.7 |
| 10000 | | | | | | | | | | | | | | 165.3 |

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|-------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| CASPL | 87.7 | 89.6 | 91.5 | 92.1 | 93.0 | 94.5 | 94.6 | 96.7 | 100.9 | 106.9 | 107.2 | 104.0 | 95.7 | 182.9 |
| PNL | 93.2 | 96.1 | 99.2 | 100.5 | 102.8 | 103.6 | 102.6 | 104.2 | 107.1 | 110.8 | 110.2 | 104.7 | 94.4 | |
| PNLT | 94.2 | 96.1 | 99.8 | 101.1 | 104.0 | 104.8 | 103.2 | 104.2 | 107.6 | 111.5 | 111.3 | 104.7 | 94.4 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 33.00
 LOCATION C41 ANECH CH AERG. RCG. ADH132 PAMB 29.5900 RELHUM 61.00

MODEL TEST POINT 7206 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 45.11 M/SEC (148.0 FPS)
 FREE-JET SPEED

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X72070
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

106.6

107.6

108.6

110.1

112.0

112.6

116.0

120.9

127.0

129.4

125.8

120.1

164.0

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MODEL TEST POINT 7207 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 91.14 M/SEC (299.0 FPS) FREE-JET SPEED

101

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 33.00
LOCATION C41 ANECH CH AERO. RDG. ADH133 PAMB 29.5900 RELHUM 56.60

07/17/79 10,160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X72070

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PVL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 299.00 REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 IALPHA 3839 TAMB 33.00
 LOCATION C41 ANECH CH AERG. RDG. ADH133 PAMB 29.5900 RELHUM 56.60

MODEL TEST POINT 7207 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 91.14 M/SEC (299.0 FPS) FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X72071

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 69.2 | 71.3 | 71.9 | 72.2 | 73.6 | 74.7 | 75.1 | 75.6 | 82.5 | 91.4 | 93.3 | 92.6 | 85.6 | 167.7 |
| 63 | 70.7 | 72.0 | 73.1 | 74.1 | 74.7 | 75.6 | 76.2 | 77.4 | 84.6 | 92.5 | 94.8 | 93.1 | 85.6 | 168.7 |
| 80 | 71.2 | 72.4 | 74.4 | 75.5 | 77.5 | 77.1 | 77.4 | 79.1 | 86.4 | 93.4 | 96.0 | 92.8 | 85.0 | 169.4 |
| 100 | 72.2 | 73.7 | 75.3 | 76.9 | 77.0 | 75.2 | 78.4 | 80.7 | 87.6 | 93.4 | 96.4 | 92.1 | 84.2 | 169.5 |
| 125 | 75.0 | 73.9 | 75.6 | 78.2 | 78.0 | 79.3 | 79.9 | 81.7 | 88.1 | 93.1 | 97.3 | 92.2 | 82.5 | 170.0 |
| 160 | 75.9 | 75.6 | 78.2 | 80.1 | 81.0 | 81.6 | 81.2 | 82.7 | 89.2 | 93.1 | 97.1 | 90.2 | 82.2 | 169.9 |
| 200 | 75.4 | 78.5 | 79.9 | 79.3 | 80.0 | 81.7 | 82.1 | 83.5 | 89.2 | 94.3 | 96.1 | 88.3 | 80.5 | 169.6 |
| 250 | 76.4 | 76.4 | 78.3 | 79.0 | 79.0 | 80.7 | 81.6 | 83.7 | 89.3 | 94.6 | 95.1 | 87.2 | 79.5 | 169.4 |
| 315 | 75.7 | 77.4 | 78.6 | 79.2 | 80.2 | 81.0 | 81.9 | 84.0 | 90.8 | 94.4 | 93.3 | 85.1 | 77.3 | 169.0 |
| 400 | 76.7 | 77.4 | 79.1 | 79.4 | 80.1 | 81.6 | 82.6 | 84.5 | 89.5 | 93.6 | 91.9 | 82.6 | 75.1 | 168.5 |
| 500 | 76.9 | 79.6 | 79.7 | 81.1 | 80.4 | 81.7 | 82.3 | 84.7 | 88.9 | 93.4 | 90.4 | 81.4 | 73.4 | 168.4 |
| 630 | 76.6 | 78.5 | 81.1 | 81.6 | 81.6 | 82.7 | 82.9 | 84.8 | 89.0 | 92.7 | 89.7 | 80.1 | 72.9 | 168.3 |
| 800 | 76.2 | 77.7 | 80.0 | 80.6 | 81.1 | 83.9 | 83.1 | 85.0 | 89.3 | 91.4 | 87.1 | 78.3 | 71.2 | 168.0 |
| 1000 | 75.6 | 78.1 | 79.5 | 81.4 | 81.6 | 84.0 | 83.6 | 84.6 | 88.1 | 90.1 | 85.0 | 77.6 | 68.9 | 167.7 |
| 1250 | 75.0 | 78.1 | 79.6 | 81.2 | 82.5 | 84.2 | 82.7 | 84.4 | 86.3 | 86.0 | 82.8 | 75.0 | 66.2 | 167.1 |
| 1600 | 72.7 | 76.6 | 79.4 | 79.9 | 81.5 | 83.0 | 81.3 | 82.2 | 84.9 | 86.8 | 80.4 | 73.1 | 63.8 | 167.0 |
| 2000 | 69.5 | 74.6 | 77.1 | 79.5 | 81.2 | 82.8 | 80.4 | 81.2 | 82.6 | 83.2 | 76.7 | 69.4 | 59.3 | 166.6 |
| 2500 | 66.1 | 72.4 | 75.9 | 78.1 | 80.6 | 80.9 | 77.5 | 77.7 | 80.1 | 78.7 | 72.7 | 65.0 | 55.6 | 166.7 |
| 3150 | 60.0 | 68.8 | 71.9 | 73.5 | 77.5 | 77.7 | 74.3 | 72.4 | 75.4 | 75.0 | 66.1 | 54.4 | 40.9 | 166.6 |
| 4000 | 51.9 | 59.7 | 65.5 | 68.2 | 68.9 | 69.5 | 67.2 | 65.6 | 67.5 | 65.1 | 55.8 | 40.8 | 22.7 | 165.5 |
| 5000 | 37.4 | 46.0 | 54.2 | 58.5 | 62.4 | 62.6 | 57.2 | 55.7 | 56.5 | 51.7 | 40.2 | 22.2 | 165.2 | |
| 6300 | 16.5 | 28.6 | 38.0 | 41.1 | 44.4 | 44.4 | 45.1 | 42.1 | 37.6 | 40.5 | 31.9 | 16.9 | 163.9 | |
| 8000 | | | 8.4 | 14.7 | 17.9 | 19.0 | 18.2 | 11.7 | 14.4 | 2.9 | | | 163.1 | |
| 10000 | | | | | | | | | | | | | 161.6 | |
| 12500 | | | | | | | | | | | | | | |
| 15000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| OSPL | 87.2 | 89.1 | 90.9 | 92.0 | 92.9 | 94.2 | 93.8 | 95.4 | 100.4 | 104.8 | 105.8 | 100.9 | 93.0 | 181.6 |
| PNL | 93.5 | 96.9 | 99.5 | 101.2 | 102.9 | 103.6 | 102.3 | 103.3 | 106.8 | 109.8 | 108.4 | 101.5 | 93.0 | |
| PNLT | 93.5 | 96.9 | 100.3 | 101.7 | 104.2 | 105.0 | 102.3 | 103.3 | 107.3 | 110.3 | 108.4 | 101.5 | 94.3 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 IALPHA 3859 TAMB 33.00
 LOCATION C41 ANECH CH AERD. RDG. ADH133 PAMB 29.5900 RELHUM 56.60

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
 7200 7207 731.5 M (2400.0 FT) SL 9032.2 SQ CH (1400.00 SQ IN) - FULL 91.14 M/SEC (299.0 FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X72080
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250 83.1 85.9 85.8 87.2 87.8 90.0 91.9 94.3 97.3 104.4 109.5 113.5 112.4 146.1
315 84.5 86.1 86.8 86.9 88.2 90.9 91.7 94.4 96.9 107.5 111.1 114.6 112.2 147.3
400 86.8 87.1 88.3 87.7 89.3 91.4 92.8 94.9 99.9 110.8 114.4 116.8 110.7 149.1
500 86.7 87.2 89.1 89.0 90.6 93.0 93.9 96.5 101.5 112.6 116.2 118.7 107.3 150.0
630 88.3 88.6 90.3 90.4 95.0 93.8 95.8 98.9 104.4 113.7 117.3 114.8 108.2 150.6
800 90.1 88.9 91.1 92.2 92.5 95.1 97.0 100.2 106.7 114.7 118.4 113.8 102.9 151.3
1000 91.7 91.0 93.2 93.0 93.9 96.7 98.4 101.8 107.0 114.3 117.9 111.9 101.5 150.8
1250 91.0 93.8 95.1 94.6 96.0 98.1 99.2 102.6 108.3 114.4 119.0 111.0 101.6 151.5
1600 92.6 91.2 93.0 94.0 95.3 98.2 100.1 103.5 108.5 114.3 119.5 110.7 101.3 151.8
2000 92.3 92.8 94.3 93.6 94.7 98.0 99.7 103.8 109.3 115.9 118.9 110.1 101.1 151.9
2500 95.7 94.5 94.7 95.5 96.3 98.2 101.1 104.5 109.7 116.1 116.8 109.5 101.0 151.1
3150 96.7 97.5 97.0 96.5 96.6 98.2 100.9 105.6 110.8 115.9 115.8 109.5 100.3 151.0
4000 96.4 96.4 98.5 97.7 97.0 98.9 101.3 105.2 110.2 115.1 114.2 107.4 98.9 150.1
5000 96.1 95.2 97.0 97.4 99.0 100.1 101.5 105.2 109.7 114.9 113.5 106.6 97.9 149.9
6300 95.2 95.9 96.9 96.9 98.4 101.0 101.9 105.1 109.5 113.3 111.8 105.4 97.3 149.1
8000 95.6 95.6 97.2 97.3 98.3 98.3 100.9 101.5 104.6 109.4 112.6 110.0 103.9 96.4 148.7
10000 95.0 95.9 96.9 97.2 99.0 101.1 101.5 104.4 108.2 112.1 108.7 103.1 95.0 148.5
12500 93.2 95.0 96.5 96.7 98.5 100.3 100.3 103.2 106.4 109.4 106.4 101.8 94.2 147.4
16000 91.9 94.7 96.2 96.7 98.6 100.3 99.5 102.2 104.8 107.9 104.3 100.7 93.4 147.5
20000 88.3 92.7 93.4 94.9 97.9 99.2 96.4 99.5 102.6 104.5 101.1 98.2 91.9 146.7
25000 87.2 89.1 91.9 92.3 95.4 97.2 94.8 94.9 99.7 99.7 97.7 94.7 90.3 145.8
31500 85.6 85.2 88.9 91.0 91.2 91.9 90.9 92.0 96.5 96.3 94.6 90.1 85.4 145.9
40000 80.2 81.0 83.7 85.3 89.2 89.7 86.3 87.1 91.2 92.1 88.8 84.9 80.8 145.1
50000 73.3 73.6 76.4 78.7 80.8 82.0 80.7 80.0 86.2 85.6 82.9 79.7 74.8 143.0
63000 68.0 67.9 69.8 72.6 72.8 74.0 75.0 73.5 81.0 79.7 75.6 73.7 68.5 142.1
80000 62.0 61.1 64.3 67.4 65.5 68.2 67.4 67.2 74.5 73.7 70.7 64.4 60.6 142.6

GASPL 106.2 106.8 108.0 108.2 109.6 111.6 112.5 115.8 120.6 126.3 128.4 124.3 118.3 163.2

TEST DATE 02-27-78

LOCATION C41 ANECH CH

TAPE NO. N299

AERO. RDS. ADH134

ALPHA SB59

TAMB 33.00

RELHUM 55.40

MODEL TEST POINT

12.2 M (40.0 FT) ARC

154.7 SQ CM (

23.99 SQ IN) -

MODEL 117.65 M/SEC (386.0 FPS)

FREE-JET SPEED

117.65 M/SEC (386.0 FPS)

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OF POOR QUALITY

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X72080

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 90.5 | 92.0 | 90.3 | 90.4 | 89.3 | 90.0 | 90.0 | 90.0 | 95.5 | 103.2 | 106.4 | 110.2 | 109.7 | 143.4 |
| 315 | 90.5 | 92.0 | 90.3 | 90.4 | 89.3 | 91.0 | 90.4 | 91.7 | 97.9 | 106.0 | 111.3 | 113.6 | 110.9 | 146.8 |
| 400 | 91.7 | 92.1 | 91.5 | 90.1 | 90.9 | 91.6 | 92.0 | 93.2 | 99.6 | 110.3 | 114.0 | 114.9 | 110.1 | 148.5 |
| 500 | 92.9 | 92.4 | 92.4 | 90.6 | 92.4 | 93.3 | 93.0 | 94.6 | 102.5 | 111.4 | 115.3 | 114.8 | 109.9 | 149.3 |
| 630 | 94.1 | 93.4 | 93.9 | 92.3 | 96.9 | 94.2 | 94.5 | 96.8 | 105.0 | 112.8 | 116.8 | 115.0 | 110.2 | 150.4 |
| 800 | 95.7 | 95.0 | 95.2 | 93.8 | 94.5 | 95.6 | 96.1 | 98.1 | 105.8 | 112.9 | 117.2 | 114.4 | 111.3 | 150.6 |
| 1000 | 97.4 | 95.0 | 96.0 | 95.6 | 95.9 | 97.3 | 97.6 | 99.6 | 107.2 | 113.0 | 118.2 | 113.5 | 111.4 | 151.1 |
| 1250 | 98.7 | 96.9 | 98.0 | 96.4 | 98.1 | 98.8 | 98.6 | 100.7 | 107.6 | 113.1 | 118.9 | 113.4 | 111.2 | 151.6 |
| 1600 | 98.4 | 100.1 | 100.1 | 98.2 | 97.7 | 99.2 | 99.2 | 99.8 | 108.6 | 114.8 | 118.3 | 112.8 | 111.1 | 151.7 |
| 2000 | 100.0 | 97.5 | 98.0 | 97.7 | 97.2 | 99.2 | 99.5 | 102.4 | 109.4 | 115.5 | 116.7 | 112.7 | 111.6 | 151.3 |
| 2500 | 98.6 | 99.1 | 99.4 | 97.4 | 98.9 | 99.7 | 101.2 | 103.4 | 110.9 | 115.8 | 116.3 | 113.3 | 111.3 | 151.6 |
| 3150 | 101.5 | 99.8 | 99.2 | 99.0 | 99.4 | 101.1 | 101.4 | 104.8 | 110.8 | 115.4 | 115.1 | 111.3 | 108.9 | 151.0 |
| 4000 | 102.0 | 102.3 | 101.3 | 100.0 | 100.3 | 101.3 | 102.3 | 105.0 | 110.5 | 115.2 | 114.2 | 110.3 | 108.3 | 150.8 |
| 5000 | 102.4 | 102.0 | 103.4 | 101.8 | 103.0 | 103.1 | 103.0 | 105.3 | 110.5 | 113.8 | 112.7 | 109.3 | 108.2 | 150.3 |
| 6300 | 103.2 | 101.7 | 102.6 | 102.1 | 102.4 | 104.0 | 103.4 | 105.3 | 110.4 | 113.1 | 110.9 | 107.7 | 107.0 | 149.9 |
| 8000 | 102.2 | 102.2 | 102.4 | 101.5 | 102.3 | 103.9 | 103.0 | 104.7 | 109.4 | 112.8 | 109.7 | 107.1 | 105.6 | 149.6 |
| 10000 | 102.4 | 102.7 | 102.5 | 101.7 | 103.0 | 104.1 | 103.0 | 104.4 | 108.0 | 110.6 | 108.0 | 106.6 | 106.2 | 149.2 |
| 12500 | 101.5 | 101.8 | 101.9 | 101.3 | 102.4 | 103.3 | 101.8 | 103.4 | 107.2 | 109.9 | 106.8 | 106.4 | 106.4 | 149.3 |
| 16000 | 99.3 | 100.4 | 101.0 | 100.3 | 102.6 | 103.3 | 101.3 | 102.6 | 106.0 | 107.6 | 104.9 | 105.3 | 106.2 | 149.4 |
| 20000 | 97.6 | 99.6 | 100.4 | 99.9 | 102.4 | 102.2 | 98.5 | 100.4 | 104.6 | 104.5 | 103.0 | 103.0 | 105.3 | 149.6 |
| 25000 | 96.0 | 99.2 | 98.6 | 98.6 | 99.9 | 100.2 | 97.3 | 96.6 | 101.1 | 102.6 | 98.5 | 98.4 | 100.9 | 149.4 |
| 31500 | 94.2 | 94.9 | 96.3 | 95.2 | 95.2 | 94.9 | 93.0 | 92.8 | 97.6 | 98.3 | 95.7 | 95.1 | 97.9 | 148.7 |
| 40000 | 89.0 | 87.9 | 90.8 | 91.9 | 93.7 | 92.7 | 88.7 | 88.6 | 92.7 | 92.0 | 89.9 | 90.0 | 92.1 | 148.3 |
| 50000 | 85.9 | 85.5 | 86.9 | 87.0 | 85.3 | 85.0 | 83.1 | 81.4 | 88.3 | 86.8 | 83.3 | 84.7 | 86.6 | 147.1 |
| 63000 | 78.0 | 77.2 | 78.6 | 79.4 | 76.8 | 77.0 | 77.3 | 74.7 | 82.6 | 81.5 | 78.9 | 75.9 | 79.5 | 145.6 |
| 80000 | 68.6 | 67.8 | 68.9 | 70.7 | 69.5 | 71.2 | 69.5 | 68.0 | 72.8 | 71.7 | 69.1 | 66.1 | 69.7 | 143.6 |
| GASPL | 112.8 | 112.7 | 112.9 | 112.0 | 113.1 | 114.0 | 113.3 | 115.3 | 120.9 | 125.8 | 127.7 | 125.0 | 122.6 | 163.8 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 386.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | 8859 | TAMB | 33.00 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH134 | PAMB | 29.5900 | RELHUM | 55.40 |

| MODEL | TEST POINT | 12.2 M (40.0 FT) | ARC | 154.7 SQ CM (23.99 SQ IN) | - MODEL | 117.65 M/SEC (386.0 FPS) |
|-------|------------|-------------------|-----|----------------------------|---------|---------------------------|
| 7200 | 7208 | | | | | |

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X72061

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 70.0 | 71.9 | 72.3 | 71.6 | 72.8 | 73.7 | 73.9 | 74.7 | 80.4 | 90.0 | 92.2 | 91.0 | 82.8 | 166.2 |
| 63 | 71.1 | 72.1 | 73.2 | 72.1 | 74.4 | 75.4 | 74.9 | 76.1 | 83.3 | 91.2 | 93.5 | 90.8 | 82.5 | 166.9 |
| 80 | 72.2 | 73.1 | 74.7 | 73.8 | 76.8 | 78.3 | 78.4 | 78.3 | 85.8 | 92.4 | 95.0 | 90.9 | 82.7 | 168.1 |
| 100 | 73.7 | 74.6 | 75.9 | 75.2 | 76.3 | 77.6 | 78.0 | 79.5 | 86.5 | 92.5 | 95.2 | 90.3 | 83.7 | 168.3 |
| 125 | 75.3 | 74.5 | 76.6 | 76.9 | 77.6 | 79.2 | 79.4 | 81.2 | 87.8 | 92.5 | 96.2 | 89.1 | 83.6 | 168.8 |
| 160 | 76.4 | 76.3 | 78.5 | 77.7 | 79.8 | 80.6 | 80.2 | 82.0 | 88.0 | 92.4 | 96.6 | 88.8 | 83.0 | 169.2 |
| 200 | 75.9 | 79.2 | 80.4 | 79.3 | 79.2 | 80.8 | 81.2 | 82.9 | 88.9 | 94.0 | 95.8 | 87.9 | 82.4 | 169.4 |
| 250 | 77.1 | 76.4 | 78.1 | 78.6 | 78.5 | 80.7 | 80.8 | 83.2 | 89.4 | 94.4 | 93.9 | 87.4 | 82.2 | 169.0 |
| 315 | 76.4 | 77.6 | 79.2 | 78.0 | 79.9 | 80.9 | 82.2 | 83.9 | 90.7 | 94.3 | 93.0 | 87.4 | 81.2 | 169.3 |
| 400 | 77.8 | 77.9 | 78.6 | 79.3 | 80.1 | 82.0 | 82.1 | 85.1 | 90.3 | 93.6 | 91.3 | 84.3 | 78.7 | 168.7 |
| 500 | 77.7 | 80.1 | 80.4 | 80.0 | 80.8 | 81.9 | 82.8 | 85.0 | 89.6 | 93.0 | 90.0 | 83.1 | 76.2 | 168.4 |
| 630 | 77.7 | 79.4 | 82.1 | 81.5 | 83.2 | 83.4 | 83.2 | 85.0 | 89.2 | 91.2 | 88.0 | 81.4 | 75.0 | 167.9 |
| 800 | 78.0 | 75.6 | 81.1 | 81.6 | 82.3 | 84.1 | 83.4 | 84.7 | 88.9 | 90.1 | 85.7 | 79.1 | 72.7 | 167.5 |
| 1000 | 76.6 | 78.9 | 80.7 | 80.7 | 82.1 | 83.9 | 82.8 | 83.9 | 87.6 | 89.5 | 84.0 | 77.8 | 70.1 | 167.3 |
| 1250 | 76.3 | 79.1 | 80.5 | 80.7 | 82.6 | 84.0 | 82.7 | 83.5 | 86.0 | 86.9 | 81.9 | 76.6 | 68.3 | 166.9 |
| 1600 | 74.5 | 77.6 | 79.5 | 80.0 | 81.8 | 82.9 | 81.2 | 82.1 | 84.7 | 85.6 | 79.8 | 75.0 | 67.1 | 166.9 |
| 2000 | 71.3 | 75.5 | 78.2 | 78.8 | 81.8 | 82.8 | 80.5 | 81.1 | 83.2 | 82.7 | 76.9 | 72.3 | 63.9 | 167.1 |
| 2500 | 67.8 | 73.6 | 76.7 | 77.7 | 81.1 | 81.1 | 77.2 | 78.3 | 81.1 | 78.4 | 73.2 | 67.2 | 58.1 | 167.3 |
| 3150 | 62.9 | 70.7 | 73.0 | 74.9 | 77.2 | 77.9 | 74.5 | 72.9 | 75.5 | 74.1 | 66.4 | 57.6 | 45.3 | 167.1 |
| 4000 | 54.8 | 61.6 | 66.9 | 68.2 | 69.5 | 69.7 | 67.3 | 65.7 | 68.2 | 65.1 | 56.3 | 45.3 | 27.8 | 166.4 |
| 5000 | 39.9 | 47.2 | 55.2 | 59.5 | 63.0 | 62.5 | 58.0 | 56.2 | 57.1 | 51.2 | 40.8 | 26.5 | 0.1 | 166.0 |
| 6300 | 18.9 | 30.5 | 39.2 | 43.8 | 44.5 | 45.0 | 42.3 | 38.2 | 40.6 | 31.7 | 16.4 | | | 164.8 |
| 8000 | | | 9.5 | 16.9 | 17.9 | 19.2 | 18.4 | 12.2 | 13.6 | 1.7 | | | | 163.2 |
| 10000 | | | | | | | | | | | | | | 161.3 |

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GASPL 88.2 89.8 91.5 91.4 93.0 94.1 93.5 95.1 100.2 104.1 105.0 99.8 92.7 181.3
 PNL 95.0 97.8 100.2 100.8 103.2 103.8 102.1 103.1 106.6 109.3 107.9 101.7 94.6
 PNL 95.0 97.8 101.0 101.5 104.5 105.0 102.1 103.1 107.4 109.9 107.9 101.7 96.0

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 IALPHA SB59 TAMB 33.00
 LOCATION C41 ANECH C41 AERO. RDG. ADH134 PAMB 29.5900 RELHUM 55.40

MODEL TEST POINT 7206 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.65 M/SEC (386.0 FPS)
 FREE-JET SPEED

09/30/79 19.452

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 30 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X72090
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. FNL

FREQ

50

60

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

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TEST DATE 02-21-76 TAPE NO. N294 ALPHA S859 TAMB 24.80
LOCATION C41 ANECH CH AERO. RDG. ADH097 PAMB 29.3620 RELNUM 39.00

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL SIZE FREE-JET SPEED
7200 7209 0. M/SEC (0. FPS)

607

08/30/79 19.452

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X72090

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 87.5 | 91.3 | 90.8 | 91.9 | 91.7 | 94.1 | 96.7 | 98.4 | 103.8 | 109.1 | 113.0 | 115.7 | 115.4 | 149.2 |
| 315 | 88.4 | 91.2 | 91.2 | 91.7 | 93.1 | 95.9 | 98.3 | 99.0 | 105.9 | 111.2 | 114.6 | 117.6 | 116.0 | 150.8 |
| 400 | 89.7 | 92.7 | 92.0 | 92.0 | 93.3 | 96.0 | 97.3 | 100.0 | 107.5 | 114.5 | 117.4 | 119.1 | 116.0 | 152.8 |
| 500 | 91.5 | 93.3 | 94.0 | 93.8 | 94.4 | 97.0 | 98.7 | 101.1 | 108.5 | 116.9 | 119.0 | 119.9 | 116.3 | 154.1 |
| 630 | 92.6 | 94.9 | 95.2 | 94.7 | 96.8 | 98.1 | 99.6 | 103.2 | 110.4 | 117.5 | 120.1 | 120.0 | 117.2 | 154.8 |
| 800 | 96.4 | 95.7 | 95.9 | 97.5 | 98.8 | 99.7 | 101.1 | 104.7 | 112.2 | 118.3 | 121.1 | 121.1 | 117.7 | 166.8 |
| 1000 | 100.2 | 101.0 | 100.5 | 99.3 | 98.9 | 101.3 | 102.4 | 106.1 | 113.3 | 118.4 | 120.7 | 120.7 | 116.8 | 155.7 |
| 1250 | 96.3 | 100.9 | 100.7 | 100.7 | 101.0 | 103.1 | 104.0 | 106.9 | 113.6 | 118.2 | 122.1 | 120.3 | 115.4 | 156.1 |
| 1600 | 96.7 | 97.8 | 98.6 | 99.3 | 100.2 | 102.8 | 103.9 | 107.1 | 114.5 | 118.7 | 121.9 | 119.1 | 114.6 | 155.9 |
| 2000 | 98.9 | 100.9 | 100.2 | 99.7 | 99.5 | 101.6 | 104.0 | 107.7 | 114.6 | 119.0 | 120.2 | 116.9 | 111.9 | 155.0 |
| 2500 | 100.6 | 101.6 | 100.6 | 100.4 | 100.5 | 103.1 | 105.2 | 108.1 | 114.5 | 119.7 | 118.7 | 115.1 | 110.3 | 154.6 |
| 3150 | 101.1 | 102.9 | 101.7 | 101.2 | 100.7 | 103.1 | 105.0 | 109.2 | 115.3 | 118.8 | 117.2 | 114.4 | 109.6 | 154.1 |
| 4000 | 101.7 | 103.3 | 103.0 | 101.5 | 101.1 | 102.9 | 104.6 | 108.5 | 114.2 | 117.9 | 115.8 | 112.0 | 107.5 | 153.1 |
| 5000 | 100.8 | 102.9 | 103.1 | 103.1 | 102.4 | 103.8 | 104.9 | 108.9 | 114.0 | 117.1 | 114.7 | 111.3 | 106.8 | 152.7 |
| 6300 | 98.8 | 102.1 | 103.4 | 103.1 | 104.5 | 105.7 | 107.9 | 113.6 | 115.8 | 113.8 | 110.4 | 106.6 | 102.2 | 152.2 |
| 8000 | 98.1 | 101.8 | 102.4 | 103.3 | 104.1 | 104.7 | 105.5 | 107.6 | 112.3 | 114.7 | 112.2 | 108.6 | 105.4 | 151.6 |
| 10000 | 96.0 | 100.9 | 102.3 | 102.4 | 104.0 | 105.9 | 104.5 | 107.3 | 110.9 | 113.7 | 110.6 | 107.9 | 104.8 | 151.3 |
| 12500 | 93.6 | 99.2 | 100.6 | 102.0 | 103.3 | 104.4 | 103.9 | 106.0 | 108.9 | 111.4 | 108.3 | 105.4 | 102.9 | 150.2 |
| 16000 | 91.1 | 97.6 | 99.1 | 100.7 | 103.2 | 104.2 | 102.4 | 104.5 | 106.4 | 109.6 | 106.3 | 103.8 | 101.5 | 150.0 |
| 20000 | 88.8 | 94.6 | 95.9 | 98.0 | 102.1 | 102.7 | 100.1 | 101.9 | 103.7 | 106.0 | 102.7 | 101.4 | 98.7 | 149.0 |
| 25000 | 85.4 | 90.5 | 93.5 | 94.1 | 98.4 | 99.6 | 97.4 | 96.9 | 102.0 | 101.0 | 98.6 | 97.6 | 97.2 | 147.9 |
| 31500 | 83.1 | 86.5 | 90.7 | 93.1 | 93.4 | 93.9 | 93.3 | 93.6 | 96.5 | 99.8 | 95.4 | 90.9 | 90.2 | 147.3 |
| 40000 | 78.4 | 81.7 | 85.4 | 87.1 | 91.4 | 91.6 | 87.7 | 88.9 | 91.7 | 94.3 | 90.5 | 86.1 | 85.3 | 146.7 |
| 50000 | 70.7 | 76.0 | 80.7 | 83.9 | 84.2 | 83.4 | 82.8 | 87.8 | 88.3 | 84.1 | 81.9 | 79.3 | 145.2 | |
| 63000 | 65.9 | 68.8 | 72.4 | 74.3 | 75.9 | 76.1 | 77.6 | 77.0 | 83.6 | 82.5 | 78.6 | 77.1 | 73.7 | 144.8 |
| 80000 | 60.1 | 62.4 | 65.7 | 69.9 | 70.8 | 71.8 | 71.3 | 73.2 | 77.1 | 77.1 | 73.8 | 71.0 | 66.2 | 146.1 |
| GASPL | 110.5 | 112.9 | 113.1 | 113.3 | 114.0 | 115.6 | 116.3 | 119.3 | 125.2 | 129.6 | 130.8 | 129.9 | 126.5 | 166.8 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 0. | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|-------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 02-21-78 | TAPE NO. | N294 | ALPHA | 3859 | TANG | 24.80 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH097 | PAMB | 29.3620 | RELHUM | 39.00 |

| MODEL | TEST POINT | ACQUSTIC RANGE | 12.2 M (40.0 FT) | ARC | 154.7 SQ CM (23.99 SQ IN) | - MODEL | 0. | M/SEC (0. FPS) |
|-------|------------|----------------|-------------------|-----|----------------------------|---------|----|-----------------|
| 7200 | 7209 | | | | | | | |

08/30/79 19.452

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 2400.0 FT. SL

IDENTIFICATION - J-ZER-FMODL X72091

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PNL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 67.9 | 72.4 | 73.5 | 73.5 | 75.3 | 78.0 | 79.3 | 81.5 | 88.3 | 94.5 | 95.6 | 95.1 | 88.7 | 170.4 |
| 63 | 69.7 | 73.0 | 74.6 | 75.4 | 76.4 | 79.1 | 80.6 | 82.6 | 89.3 | 96.6 | 97.2 | 95.9 | 89.0 | 171.7 |
| 80 | 70.7 | 74.6 | 75.9 | 76.2 | 76.7 | 80.2 | 81.7 | 84.7 | 91.2 | 97.2 | 98.2 | 95.9 | 89.7 | 172.5 |
| 100 | 74.4 | 75.3 | 76.7 | 76.9 | 78.7 | 81.7 | 82.9 | 86.2 | 92.9 | 97.9 | 98.2 | 96.9 | 90.1 | 173.4 |
| 125 | 76.2 | 80.5 | 81.2 | 80.7 | 80.7 | 83.2 | 84.2 | 87.4 | 93.9 | 97.9 | 98.7 | 96.3 | 89.0 | 173.3 |
| 160 | 74.1 | 80.3 | 81.2 | 81.9 | 82.7 | 84.9 | 85.7 | 88.2 | 94.1 | 97.6 | 99.9 | 95.7 | 87.2 | 173.7 |
| 200 | 76.2 | 77.0 | 78.9 | 80.4 | 81.7 | 84.4 | 85.4 | 88.2 | 94.8 | 97.8 | 99.4 | 94.2 | 85.9 | 173.5 |
| 250 | 76.1 | 79.8 | 80.3 | 80.6 | 80.6 | 83.1 | 85.3 | 88.6 | 94.7 | 97.9 | 97.4 | 91.6 | 82.6 | 172.7 |
| 315 | 77.3 | 80.2 | 80.4 | 81.0 | 81.5 | 84.3 | 86.2 | 88.7 | 94.3 | 98.3 | 95.4 | 89.2 | 80.2 | 172.3 |
| 400 | 77.4 | 81.0 | 81.1 | 81.4 | 81.5 | 84.0 | 85.7 | 89.4 | 94.7 | 97.0 | 93.5 | 87.8 | 78.5 | 171.8 |
| 500 | 77.5 | 81.0 | 82.1 | 81.5 | 81.5 | 83.6 | 85.0 | 88.5 | 93.3 | 95.7 | 91.6 | 84.8 | 75.3 | 170.8 |
| 630 | 76.1 | 80.2 | 81.9 | 82.8 | 82.6 | 84.1 | 85.1 | 88.5 | 92.6 | 94.4 | 90.0 | 83.5 | 73.6 | 170.4 |
| 800 | 73.6 | 79.1 | 81.9 | 82.6 | 83.1 | 84.6 | 85.6 | 87.3 | 92.0 | 92.6 | 88.6 | 81.6 | 72.2 | 169.9 |
| 1000 | 72.5 | 78.5 | 80.5 | 82.5 | 83.9 | 84.7 | 85.9 | 86.8 | 90.5 | 91.4 | 86.6 | 79.4 | 69.9 | 169.3 |
| 1250 | 69.9 | 77.2 | 80.3 | 81.5 | 83.7 | 85.6 | 84.2 | 86.9 | 88.9 | 90.0 | 84.5 | 77.9 | 67.9 | 169.0 |
| 1600 | 66.6 | 74.9 | 78.2 | 80.7 | 82.6 | 84.0 | 83.2 | 84.7 | 86.4 | 87.1 | 81.3 | 74.0 | 63.6 | 167.9 |
| 2000 | 63.1 | 72.7 | 76.3 | 79.2 | 82.4 | 83.6 | 81.6 | 83.0 | 83.6 | 84.6 | 78.3 | 70.6 | 59.2 | 167.6 |
| 2500 | 57.0 | 68.6 | 72.2 | 75.9 | 80.7 | 81.6 | 78.7 | 79.7 | 80.0 | 79.9 | 72.9 | 65.6 | 51.5 | 166.7 |
| 3150 | 52.2 | 61.9 | 67.9 | 70.3 | 75.7 | 77.2 | 74.7 | 73.1 | 76.4 | 72.5 | 65.9 | 56.7 | 41.6 | 165.6 |
| 4000 | 43.8 | 53.2 | 61.3 | 66.1 | 67.7 | 68.6 | 67.6 | 68.6 | 67.1 | 66.6 | 56.0 | 41.1 | 20.1 | 164.9 |
| 5000 | 29.2 | 40.9 | 49.8 | 54.7 | 60.7 | 61.5 | 57.0 | 56.5 | 56.0 | 53.5 | 41.4 | 22.7 | 164.4 | |
| 6300 | 3.8 | 20.0 | 30.3 | 37.5 | 43.1 | 44.2 | 42.6 | 39.6 | 40.1 | 33.3 | 17.2 | | 162.8 | |
| 8000 | | | | | | | | | | | | | 162.5 | |
| 10000 | | | | | | | | | | | | | 163.6 | |

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GASPL 86.9 90.8 92.2 93.1 94.2 96.1 96.8 99.4 104.7 106.2 106.1 104.8 97.5 104.2
 PNL 91.7 96.6 99.2 101.1 103.5 105.0 104.3 106.2 110.3 112.7 110.7 105.6 97.0
 PNL 92.9 96.6 99.2 101.1 104.7 106.1 104.8 106.2 110.9 113.3 111.6 106.6 98.3

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-21-78 TAPE NO. N294 ALPHA 3859 TAND 24.80
 LOCATION C41 ANECH CH AERO. RDG. ADH097 PAND 29.3620 RELNUM 39.00

MODEL TEST POINT 7209 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. FREE-JET SPEED M/SEC (0. FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-150-FMODL X72100
 BACKGROUND FJB150-AFMDL X01500

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 85.3 | 89.8 | 89.1 | 89.6 | 90.2 | 92.6 | 95.0 | 96.9 | 99.8 | 107.4 | 111.6 | 114.2 | 114.1 | 147.7 |
| 315 | 86.9 | 88.4 | 88.9 | 89.7 | 92.1 | 93.9 | 94.8 | 97.2 | 101.7 | 109.2 | 112.9 | 116.3 | 114.5 | 149.2 |
| 400 | 88.7 | 89.7 | 90.5 | 90.0 | 91.8 | 94.5 | 95.6 | 97.7 | 103.2 | 113.5 | 116.7 | 117.6 | 114.0 | 151.4 |
| 500 | 88.7 | 90.0 | 92.0 | 92.3 | 93.2 | 95.8 | 96.7 | 99.1 | 104.8 | 115.1 | 118.5 | 118.4 | 114.1 | 152.7 |
| 630 | 90.8 | 91.1 | 92.9 | 92.7 | 97.8 | 96.6 | 97.5 | 101.4 | 106.6 | 116.0 | 119.6 | 118.3 | 114.4 | 153.4 |
| 800 | 94.8 | 91.6 | 93.9 | 94.7 | 95.3 | 97.6 | 98.5 | 102.9 | 108.4 | 116.7 | 120.6 | 119.0 | 113.7 | 154.2 |
| 1000 | 97.2 | 97.2 | 98.2 | 97.0 | 96.9 | 99.0 | 100.4 | 104.0 | 109.5 | 116.3 | 120.7 | 119.1 | 112.8 | 154.3 |
| 1250 | 95.3 | 98.3 | 100.1 | 99.9 | 100.2 | 101.6 | 101.2 | 104.9 | 110.6 | 115.7 | 122.3 | 119.5 | 110.9 | 155.1 |
| 1600 | 95.9 | 94.5 | 96.2 | 96.8 | 98.6 | 101.2 | 102.3 | 105.5 | 111.0 | 115.8 | 121.8 | 118.0 | 108.2 | 154.6 |
| 2000 | 96.5 | 96.3 | 97.6 | 97.1 | 97.4 | 99.8 | 101.7 | 106.1 | 111.3 | 116.4 | 121.3 | 115.8 | 107.1 | 154.1 |
| 2500 | 98.4 | 97.7 | 99.0 | 98.7 | 98.8 | 100.4 | 102.8 | 106.5 | 111.5 | 117.6 | 119.8 | 114.5 | 105.0 | 153.6 |
| 3150 | 101.7 | 100.3 | 100.3 | 99.5 | 99.6 | 101.2 | 103.1 | 107.3 | 112.0 | 116.6 | 118.3 | 112.3 | 103.5 | 152.7 |
| 4000 | 101.8 | 101.2 | 102.2 | 100.7 | 100.8 | 101.9 | 103.0 | 106.9 | 111.2 | 116.3 | 116.2 | 109.9 | 101.1 | 151.8 |
| 5000 | 101.6 | 101.2 | 102.4 | 102.4 | 102.4 | 102.3 | 103.2 | 107.2 | 110.9 | 116.1 | 115.0 | 108.6 | 99.9 | 151.5 |
| 6300 | 100.5 | 100.7 | 102.4 | 102.1 | 102.6 | 103.7 | 103.9 | 106.6 | 110.8 | 114.4 | 113.1 | 106.4 | 98.8 | 150.6 |
| 8000 | 100.4 | 100.6 | 101.7 | 101.8 | 103.6 | 104.0 | 104.0 | 106.4 | 110.4 | 113.9 | 112.0 | 105.4 | 97.7 | 150.5 |
| 10000 | 99.8 | 100.3 | 102.0 | 101.5 | 103.6 | 105.0 | 104.1 | 106.7 | 109.5 | 113.3 | 111.0 | 105.0 | 96.6 | 150.6 |
| 12500 | 97.1 | 99.2 | 100.4 | 101.6 | 102.6 | 104.3 | 103.7 | 105.4 | 107.3 | 110.3 | 108.6 | 103.2 | 95.4 | 149.4 |
| 16000 | 94.9 | 97.4 | 99.8 | 101.0 | 103.3 | 104.3 | 102.0 | 104.7 | 105.6 | 109.0 | 106.8 | 100.9 | 94.6 | 149.7 |
| 20000 | 90.1 | 94.5 | 96.3 | 98.0 | 102.2 | 103.3 | 100.0 | 102.1 | 103.7 | 105.6 | 104.2 | 98.3 | 92.2 | 149.1 |
| 25000 | 88.6 | 90.3 | 93.5 | 94.0 | 99.2 | 99.9 | 97.7 | 97.3 | 101.4 | 101.4 | 100.1 | 94.1 | 90.1 | 148.0 |
| 31500 | 86.5 | 86.7 | 91.2 | 93.4 | 93.8 | 93.8 | 93.5 | 94.1 | 97.7 | 99.5 | 96.5 | 89.5 | 84.5 | 147.6 |
| 40000 | 81.8 | 82.2 | 86.2 | 87.5 | 91.7 | 91.9 | 88.2 | 89.1 | 93.0 | 94.9 | 92.0 | 83.9 | 80.3 | 147.3 |
| 50000 | 74.5 | 75.4 | 78.4 | 81.2 | 83.5 | 84.2 | 83.2 | 82.5 | 87.7 | 89.2 | 85.9 | 78.9 | 74.0 | 145.4 |
| 63000 | 69.0 | 69.8 | 73.2 | 74.9 | 74.9 | 76.5 | 78.1 | 76.5 | 83.8 | 83.3 | 79.2 | 72.4 | 68.4 | 145.0 |
| 80000 | 63.5 | 63.7 | 67.5 | 70.0 | 69.1 | 71.5 | 70.8 | 71.3 | 77.7 | 77.7 | 74.8 | 64.9 | 60.3 | 146.1 |
| OASPL | 110.8 | 110.8 | 112.2 | 112.2 | 113.5 | 114.7 | 114.7 | 117.9 | 122.2 | 127.8 | 130.9 | 128.4 | 123.2 | 165.7 |

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TEST DATE 02-27-78 TAPE NO. N299 ALPHA 5859 TAMB 37.00
 LOCATION C41 ANECH CH AERO. RDG. ADH123 PAMB 29.3300 RELHUM 51.40

MODEL 7200 TEST POINT 7210 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 46.02 M/SEC (151.0 FPS) FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-150-FMODL X72100

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50
63
80
100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

88.0 92.0 90.7 90.8 90.8 92.6 94.2 95.4 97.8 104.6 108.4 112.5 113.2 145.8
 315 99.6 90.7 90.7 90.9 92.7 94.0 94.4 96.2 100.3 107.5 110.9 114.4 114.3 147.7
 400 91.4 92.0 92.3 91.2 92.5 94.5 95.2 97.0 102.4 112.5 115.5 116.8 114.9 150.7
 500 92.5 92.3 93.6 93.6 93.8 95.8 96.2 98.2 103.9 114.0 117.4 117.9 116.0 152.1
 630 93.6 93.4 94.7 93.9 98.4 96.7 97.1 100.5 105.8 115.0 118.7 118.1 116.3 153.0
 800 97.2 93.7 93.5 95.8 95.9 97.7 93.1 102.0 107.7 115.9 119.9 119.4 116.4 154.0
 1000 99.0 96.8 99.5 97.9 97.4 99.1 100.0 103.1 108.9 115.6 120.2 119.9 114.4 154.2
 1250 98.0 100.6 101.9 101.2 100.9 101.7 100.8 103.9 109.9 114.9 121.7 120.1 112.7 154.9
 1600 98.6 96.8 98.1 98.1 98.3 101.4 101.9 104.6 110.3 114.9 121.1 118.6 110.2 154.2
 2000 98.7 98.2 99.4 98.2 98.1 100.0 101.3 105.1 110.6 115.4 120.5 116.2 107.8 153.5
 2500 101.3 99.3 100.3 99.7 99.4 100.7 102.5 105.6 110.7 116.6 118.9 114.7 106.5 152.9
 3150 103.9 102.0 101.7 100.6 100.3 101.5 102.8 106.4 111.4 115.8 117.5 112.6 104.3 152.2
 4000 103.9 102.9 103.6 101.7 101.5 102.2 102.8 106.2 110.6 115.5 115.5 110.3 103.2 151.4
 5000 103.5 102.9 103.9 103.6 102.8 102.8 103.1 106.5 110.5 115.4 114.4 109.2 102.3 151.2
 6300 102.9 102.9 104.3 103.6 103.7 104.3 103.9 106.1 110.5 113.8 112.7 107.1 101.6 150.5
 8000 103.1 103.8 103.5 104.3 104.7 104.2 106.1 110.3 113.5 111.8 106.3 100.9 150.7
 10000 102.6 102.8 104.1 103.3 105.2 105.9 104.6 106.6 109.6 113.2 111.1 106.2 100.4 151.0
 12500 99.9 101.7 102.6 103.5 104.2 105.4 104.4 105.6 107.7 110.6 108.9 104.7 100.6 150.2
 16000 98.6 100.8 102.7 103.5 105.3 105.8 103.1 105.3 106.4 109.6 107.6 102.9 99.2 151.0
 20000 93.8 98.0 99.4 100.7 104.5 105.1 101.4 103.2 105.0 106.8 105.5 100.8 98.2 150.8
 25000 92.3 93.8 96.8 97.0 101.9 102.1 99.7 98.8 103.3 103.1 102.0 97.2 93.3 150.2
 31500 90.2 90.4 94.7 96.7 97.0 96.7 96.1 99.9 101.4 98.5 92.6 89.9 150.1
 40000 85.5 85.9 89.8 90.9 94.9 94.9 90.8 91.1 95.2 96.9 94.0 87.0 84.0 149.9
 50000 78.2 79.1 82.0 84.5 86.7 87.2 85.8 84.5 89.9 91.1 87.9 81.9 79.4 147.9
 63000 72.7 73.5 76.7 78.3 78.1 79.5 80.6 78.5 86.0 85.3 81.2 75.5 72.8 147.4
 80000 57.2 67.4 71.0 73.4 72.3 74.5 73.3 73.3 79.8 79.6 76.7 68.0 63.0 148.4

GASPL 113.1 113.0 114.1 113.8 114.8 115.5 114.9 117.4 121.8 127.0 130.2 126.5 124.5 165.7

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MODEL/FULL SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 161.00 REFRACTION CORRECTION - YES
 INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMS 37.00
 LOCATION C41 ANECH CH AERO. RDG. ADH123 PAMS 29.3300 RELHUM 51.40

MODEL TEST POINT 7210 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 46.02 M/SEC (151.0 FPS) FREE-JET SPEED

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-150-FMODL X72101

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 69.6 | 71.8 | 73.1 | 72.8 | 74.4 | 76.6 | 77.2 | 78.5 | 83.2 | 92.2 | 93.8 | 92.9 | 87.6 | 168.3 |
| 63 | 70.7 | 72.1 | 74.6 | 75.1 | 75.7 | 77.9 | 78.2 | 79.7 | 84.7 | 93.7 | 95.6 | 93.9 | 88.7 | 169.8 |
| 80 | 71.7 | 73.1 | 75.5 | 75.4 | 80.3 | 78.7 | 79.0 | 82.0 | 86.6 | 94.7 | 96.8 | 94.0 | 88.8 | 170.6 |
| 100 | 75.2 | 73.3 | 76.2 | 77.3 | 77.8 | 79.7 | 80.0 | 83.5 | 88.4 | 95.5 | 98.0 | 95.2 | 88.7 | 171.7 |
| 125 | 77.0 | 78.3 | 80.1 | 79.3 | 79.1 | 81.0 | 81.7 | 84.8 | 89.5 | 95.2 | 98.2 | 95.6 | 86.6 | 171.9 |
| 160 | 75.8 | 80.0 | 82.4 | 82.4 | 82.6 | 83.5 | 82.4 | 85.2 | 90.4 | 94.2 | 98.4 | 95.5 | 84.4 | 172.6 |
| 200 | 76.1 | 76.0 | 78.4 | 79.1 | 80.8 | 83.0 | 83.4 | 85.6 | 90.6 | 94.1 | 98.6 | 93.7 | 81.5 | 171.8 |
| 250 | 75.9 | 77.1 | 79.5 | 79.1 | 79.4 | 81.4 | 82.6 | 86.0 | 90.6 | 94.3 | 97.7 | 90.8 | 78.5 | 171.2 |
| 315 | 78.0 | 77.8 | 80.0 | 80.3 | 80.5 | 81.8 | 83.5 | 86.1 | 90.5 | 95.2 | 95.7 | 88.8 | 76.3 | 170.6 |
| 400 | 80.1 | 80.2 | 81.1 | 80.8 | 81.0 | 82.4 | 83.5 | 86.7 | 90.8 | 93.9 | 93.8 | 86.0 | 73.1 | 169.8 |
| 500 | 79.6 | 80.6 | 82.7 | 81.7 | 81.9 | 82.8 | 83.2 | 86.1 | 89.7 | 93.3 | 91.3 | 83.1 | 71.0 | 169.0 |
| 630 | 78.8 | 80.3 | 82.7 | 83.3 | 83.0 | 83.1 | 83.3 | 86.2 | 89.2 | 92.8 | 89.7 | 81.3 | 69.1 | 168.9 |
| 800 | 77.7 | 79.9 | 82.8 | 83.0 | 83.6 | 84.4 | 83.9 | 85.5 | 88.9 | 90.8 | 87.5 | 78.5 | 67.2 | 168.2 |
| 1000 | 77.5 | 79.8 | 82.1 | 82.7 | 84.6 | 84.7 | 84.0 | 85.3 | 88.5 | 90.2 | 86.2 | 77.1 | 65.4 | 168.3 |
| 1250 | 76.4 | 79.1 | 82.1 | 82.3 | 84.8 | 85.7 | 84.2 | 85.7 | 87.6 | 89.5 | 84.9 | 76.1 | 63.5 | 168.7 |
| 1600 | 72.9 | 77.5 | 80.2 | 82.3 | 83.5 | 85.0 | 83.8 | 84.3 | 85.3 | 86.3 | 81.9 | 73.3 | 61.3 | 167.9 |
| 2000 | 70.7 | 76.0 | 79.9 | 82.0 | 84.5 | 85.2 | 82.3 | 83.8 | 83.6 | 84.8 | 79.6 | 69.9 | 56.9 | 168.6 |
| 2500 | 64.1 | 71.9 | 75.7 | 78.5 | 83.1 | 84.0 | 80.1 | 81.0 | 81.4 | 80.7 | 75.8 | 64.9 | 50.9 | 168.5 |
| 3150 | 59.2 | 66.3 | 71.3 | 73.2 | 79.2 | 79.2 | 76.9 | 75.1 | 77.7 | 74.6 | 68.9 | 56.3 | 37.7 | 167.8 |
| 4000 | 50.8 | 57.1 | 65.3 | 69.7 | 73.3 | 71.4 | 70.4 | 69.1 | 70.5 | 68.2 | 59.1 | 42.8 | 19.8 | 167.7 |
| 5000 | 36.4 | 45.1 | 54.2 | 58.5 | 64.2 | 64.7 | 60.1 | 58.7 | 59.5 | 56.1 | 44.9 | 23.5 | | 167.6 |
| 6300 | 11.3 | 24.1 | 34.3 | 41.4 | 46.0 | 47.2 | 45.0 | 41.3 | 42.2 | 36.1 | 20.9 | | | 165.5 |
| 8000 | | | | | | | | | | | | | | 165.0 |
| 10000 | | | | | | | | | | | | | | 166.1 |

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| | | | | | | | | | | | | | | |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| OASPL | 86.8 | 90.4 | 92.9 | 93.3 | 94.7 | 95.6 | 95.1 | 97.3 | 101.1 | 105.5 | 107.4 | 105.5 | 95.9 | 163.2 |
| PWL | 94.8 | 97.8 | 101.2 | 102.6 | 105.0 | 106.0 | 104.0 | 105.5 | 107.6 | 110.5 | 110.5 | 104.5 | 94.6 | |
| PNLT | 96.0 | 98.8 | 101.8 | 103.1 | 106.3 | 107.2 | 104.0 | 105.5 | 107.6 | 111.1 | 111.5 | 104.5 | 94.6 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

| | | | | | | | |
|-----------|-----------------|---------------|-------------------------|-------------------------------------|---------|----------------|--------------------------|
| TEST DATE | 02-27-78 | TAPE NO. | N299 | 1ALPHA | S859 | TAMB | 37.00 |
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH123 | PAMB | 29.3300 | RELHUM | 51.40 |
| MODEL | TEST POINT 7210 | ACUSTIC RANGE | 731.5 M (2400.0 FT) SL | 9032.2 SQ CM (1400.00 SQ IN) - FULL | SIZE | FREE-JET SPEED | 46.02 M/SEC (151.0 FPS) |

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 88 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X72110
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 83.5 | 67.1 | 86.6 | 67.4 | 88.4 | 90.6 | 93.2 | 95.4 | 98.1 | 105.1 | 110.0 | 113.7 | 113.1 | 146.6 |
| 315 | 85.4 | 66.9 | 87.4 | 68.0 | 89.6 | 91.9 | 92.6 | 95.0 | 100.2 | 107.7 | 111.9 | 114.6 | 113.2 | 147.6 |
| 400 | 87.1 | 67.7 | 88.9 | 68.5 | 90.3 | 92.7 | 93.6 | 96.2 | 101.2 | 111.3 | 114.9 | 116.6 | 112.0 | 148.8 |
| 500 | 88.0 | 68.5 | 90.2 | 69.8 | 91.9 | 93.6 | 95.2 | 97.6 | 103.0 | 113.4 | 117.0 | 118.7 | 110.3 | 150.9 |
| 630 | 88.3 | 68.9 | 90.6 | 69.9 | 91.5 | 95.1 | 96.5 | 99.4 | 104.9 | 114.0 | 117.6 | 116.5 | 108.4 | 151.4 |
| 800 | 91.6 | 90.1 | 92.2 | 93.7 | 93.5 | 96.4 | 97.8 | 100.9 | 107.2 | 115.0 | 119.1 | 116.0 | 106.4 | 152.2 |
| 1000 | 93.2 | 92.2 | 94.0 | 94.0 | 94.9 | 97.5 | 99.4 | 102.6 | 108.0 | 114.3 | 119.2 | 115.1 | 104.3 | 152.0 |
| 1250 | 91.6 | 93.6 | 95.6 | 95.6 | 97.2 | 99.6 | 100.2 | 104.1 | 108.6 | 114.4 | 120.3 | 114.7 | 102.9 | 152.7 |
| 1600 | 93.6 | 92.2 | 94.2 | 95.5 | 97.1 | 99.7 | 101.3 | 104.6 | 110.2 | 114.0 | 120.6 | 114.0 | 103.2 | 152.6 |
| 2000 | 95.3 | 94.6 | 95.0 | 95.3 | 96.2 | 98.6 | 100.7 | 105.1 | 110.6 | 115.4 | 119.6 | 112.6 | 102.3 | 152.5 |
| 2500 | 97.7 | 97.2 | 97.7 | 96.5 | 97.1 | 99.7 | 102.3 | 105.5 | 110.5 | 115.6 | 119.7 | 111.5 | 102.2 | 152.7 |
| 3150 | 101.0 | 103.2 | 99.0 | 98.3 | 98.1 | 100.5 | 102.6 | 106.6 | 111.6 | 115.1 | 117.3 | 110.2 | 101.2 | 151.6 |
| 4000 | 101.6 | 101.1 | 101.9 | 100.2 | 98.7 | 100.3 | 102.2 | 106.7 | 110.7 | 114.6 | 115.9 | 108.4 | 99.4 | 151.0 |
| 5000 | 101.5 | 101.6 | 102.7 | 101.9 | 101.0 | 102.3 | 103.2 | 106.6 | 110.7 | 114.6 | 114.4 | 106.6 | 98.3 | 150.6 |
| 6300 | 99.5 | 100.6 | 102.7 | 101.9 | 102.1 | 103.5 | 103.4 | 106.4 | 111.3 | 114.1 | 113.1 | 105.3 | 98.3 | 150.5 |
| 8000 | 99.9 | 100.9 | 101.7 | 101.6 | 102.6 | 104.0 | 104.3 | 106.4 | 110.7 | 112.3 | 111.3 | 103.9 | 96.9 | 149.9 |
| 10000 | 98.6 | 100.6 | 102.0 | 101.0 | 102.6 | 105.2 | 104.4 | 106.7 | 109.3 | 112.0 | 110.3 | 103.0 | 96.1 | 150.0 |
| 12500 | 96.9 | 99.3 | 100.4 | 100.7 | 101.9 | 103.6 | 103.6 | 104.9 | 107.6 | 109.9 | 108.1 | 101.0 | 94.7 | 149.1 |
| 16000 | 94.7 | 97.3 | 99.3 | 100.3 | 102.2 | 103.6 | 102.6 | 104.5 | 105.9 | 108.6 | 106.1 | 100.0 | 93.9 | 149.3 |
| 20000 | 89.5 | 94.1 | 95.9 | 97.4 | 101.6 | 102.9 | 100.3 | 102.7 | 104.1 | 105.5 | 103.1 | 97.4 | 92.1 | 143.9 |
| 25000 | 88.2 | 90.4 | 93.4 | 93.9 | 96.4 | 100.0 | 97.6 | 98.2 | 101.6 | 101.3 | 98.6 | 93.2 | 90.5 | 147.9 |
| 31500 | 86.4 | 87.1 | 90.6 | 92.6 | 93.0 | 93.7 | 93.9 | 95.3 | 98.1 | 99.7 | 95.9 | 89.2 | 85.4 | 147.7 |
| 40000 | 81.5 | 82.2 | 85.7 | 87.2 | 91.3 | 92.3 | 88.1 | 89.2 | 93.2 | 93.7 | 91.5 | 83.6 | 81.2 | 147.1 |
| 50000 | 74.4 | 75.4 | 78.6 | 80.6 | 82.7 | 84.2 | 83.9 | 83.0 | 86.7 | 87.5 | 84.6 | 78.6 | 75.2 | 145.2 |
| 63000 | 68.9 | 69.5 | 72.1 | 74.1 | 75.1 | 76.7 | 77.5 | 76.6 | 83.6 | 80.3 | 79.2 | 72.9 | 69.1 | 144.3 |
| 80000 | 63.0 | 63.4 | 66.4 | 69.9 | 67.6 | 70.7 | 70.2 | 70.5 | 77.6 | 76.0 | 73.7 | 64.1 | 61.0 | 145.3 |
| QASPL | 109.9 | 110.4 | 111.5 | 111.2 | 112.5 | 114.1 | 114.4 | 117.3 | 121.7 | 126.3 | 129.6 | 125.6 | 119.6 | 164.4 |

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| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | 3859 | TAMP | 37.00 |
|-----------|--------------|-----------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. NO. | ADH122 | PAHB | 29.3300 | RELHUM | 84.00 |

| MODEL | TEST POINT | ACOUSTIC RANGE | 12.2 M (40.0 FT) ARC | 154.7 SQ CH (23.99 SQ IN) - MODEL | 90.83 M/SEC (208.0 FPS) | FREE-JET SPEED |
|-------|------------|----------------|-----------------------|------------------------------------|--------------------------|----------------|
| 7200 | 7211 | | | | | |

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 88 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X72110

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

15000

20000

25000

31500

40000

50000

63000

80000

OASPL

114.5

115.1

114.9

115.5

116.3

115.4

117.1

122.1

125.8

128.8

126.2

122.2

164.9

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 298.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 3859 TAMS 37.00
LOCATION C41 ANECH CH AERO. RDG. ADH122 PAMB 29.3300 RELNUM. 84.00

MODEL TEST POINT 7211 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 90.88 M/SEC (298.0 FPS) FREE-JET SPEED

07/17/79 10.180

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X72111

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PUL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 69.2 | 71.3 | 71.8 | 72.5 | 73.6 | 74.9 | 75.1 | 76.3 | 82.4 | 91.3 | 93.4 | 92.0 | 85.0 | 167.4 |
| 63 | 70.8 | 72.0 | 73.3 | 73.8 | 75.2 | 76.0 | 76.4 | 77.6 | 84.2 | 91.9 | 94.5 | 92.5 | 84.6 | 168.2 |
| 80 | 71.7 | 72.9 | 74.6 | 75.8 | 83.2 | 77.4 | 77.7 | 79.3 | 86.6 | 93.1 | 96.0 | 92.8 | 84.4 | 169.3 |
| 100 | 74.0 | 74.8 | 76.2 | 77.7 | 76.8 | 78.7 | 78.9 | 80.7 | 87.6 | 92.7 | 96.5 | 92.7 | 84.0 | 169.5 |
| 125 | 75.2 | 74.2 | 76.4 | 77.9 | 78.1 | 79.8 | 80.4 | 82.2 | 88.3 | 92.6 | 97.3 | 92.0 | 82.2 | 169.9 |
| 160 | 76.9 | 76.9 | 78.2 | 78.5 | 80.4 | 81.8 | 81.2 | 83.7 | 89.7 | 92.2 | 97.4 | 91.1 | 82.3 | 170.1 |
| 200 | 74.9 | 77.7 | 79.6 | 79.3 | 80.3 | 81.9 | 82.3 | 84.0 | 90.2 | 93.3 | 96.2 | 89.2 | 80.7 | 169.7 |
| 250 | 76.6 | 75.8 | 78.1 | 78.7 | 79.1 | 80.9 | 81.6 | 84.5 | 89.8 | 93.6 | 96.2 | 87.8 | 80.0 | 169.8 |
| 315 | 76.5 | 77.3 | 78.1 | 79.2 | 79.6 | 81.7 | 83.1 | 84.8 | 91.1 | 92.9 | 93.6 | 86.3 | 78.4 | 168.9 |
| 400 | 77.6 | 78.6 | 79.8 | 80.9 | 80.6 | 82.5 | 83.3 | 86.0 | 90.0 | 92.5 | 92.1 | 84.0 | 75.8 | 168.5 |
| 500 | 81.2 | 81.7 | 81.1 | 82.7 | 81.2 | 82.4 | 83.0 | 85.9 | 90.1 | 92.4 | 90.6 | 82.1 | 74.1 | 168.6 |
| 630 | 81.5 | 82.3 | 83.7 | 84.3 | 83.4 | 84.4 | 84.1 | 86.0 | 91.0 | 92.1 | 89.4 | 80.8 | 73.6 | 169.1 |
| 800 | 79.8 | 81.9 | 84.1 | 85.0 | 85.1 | 85.8 | 84.5 | 86.0 | 90.7 | 90.4 | 87.4 | 78.8 | 71.2 | 168.9 |
| 1000 | 79.0 | 82.0 | 85.0 | 85.2 | 86.1 | 86.8 | 85.8 | 86.4 | 89.3 | 90.0 | 86.2 | 77.5 | 69.5 | 169.2 |
| 1250 | 78.8 | 81.9 | 83.9 | 84.3 | 86.1 | 88.1 | 88.0 | 86.6 | 87.9 | 87.9 | 83.8 | 76.0 | 66.9 | 169.0 |
| 1600 | 76.3 | 80.7 | 83.5 | 83.6 | 84.9 | 86.4 | 85.1 | 84.5 | 86.2 | 86.5 | 81.6 | 73.2 | 64.4 | 168.9 |
| 2000 | 73.2 | 78.3 | 81.0 | 83.8 | 85.4 | 86.1 | 83.9 | 84.0 | 84.5 | 83.4 | 78.0 | 69.5 | 60.0 | 169.0 |
| 2500 | 70.8 | 76.3 | 79.9 | 80.2 | 84.2 | 84.8 | 81.1 | 81.6 | 82.6 | 79.4 | 73.6 | 64.7 | 56.4 | 169.3 |
| 3150 | 61.6 | 70.1 | 74.0 | 75.2 | 79.7 | 80.6 | 77.5 | 76.0 | 77.1 | 75.3 | 67.0 | 54.8 | 41.4 | 168.4 |
| 4000 | 53.3 | 60.9 | 66.9 | 69.8 | 70.9 | 71.5 | 70.3 | 69.3 | 69.2 | 65.4 | 57.3 | 41.4 | 23.6 | 167.2 |
| 5000 | 38.9 | 47.6 | 55.8 | 59.8 | 64.7 | 65.1 | 59.6 | 57.9 | 58.9 | 52.1 | 41.0 | 22.9 | | 167.1 |
| 6300 | 17.8 | 29.7 | 39.6 | 42.5 | 46.0 | 47.2 | 45.2 | 40.8 | 42.8 | 31.6 | 18.7 | | | 165.6 |
| 8000 | | | | | | | | | | | | | | 164.9 |
| 10000 | | | | | | | | | | | | | | 163.8 |

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| | | | | | | | | | | | | | | |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| GASPL | 89.6 | 91.4 | 93.4 | 94.2 | 95.3 | 96.3 | 95.4 | 96.8 | 101.2 | 104.0 | 106.0 | 101.0 | 92.7 | 182.4 |
| PNL | 96.4 | 99.8 | 102.5 | 103.9 | 105.7 | 106.6 | 104.8 | 105.4 | 109.0 | 109.1 | 109.1 | 101.6 | 93.3 | |
| PNLT | 96.4 | 99.8 | 103.2 | 104.4 | 107.1 | 107.9 | 105.3 | 105.4 | 108.6 | 109.1 | 109.1 | 101.6 | 94.6 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 IALPHA SB59 TAMB 37.00
LOCATION C41 ANECH CH AERO. RDG. ADH122 PAMB 29.3300 RELHUM 54.00

MODEL TEST POINT ACQUSTIC RANGE SIZE FREE-JET SPEED
7200 7211 731.5 M (2400.0 FT) SL 9032.2 SQ CH (1400.00 SQ IN) - FULL 90.83 M/SEC (298.0 FPS)

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X72120
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PHL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 83.1 | 85.6 | 85.9 | 87.2 | 87.8 | 89.5 | 91.6 | 94.8 | 97.3 | 104.4 | 109.3 | 113.2 | 112.6 | 146.0 |
| 315 | 84.5 | 86.6 | 86.9 | 88.5 | 89.5 | 91.1 | 91.7 | 94.2 | 99.4 | 107.2 | 111.1 | 114.1 | 111.5 | 146.9 |
| 400 | 86.3 | 87.1 | 88.0 | 87.9 | 89.3 | 91.6 | 93.0 | 95.2 | 100.7 | 110.5 | 114.2 | 115.1 | 110.0 | 148.7 |
| 500 | 86.7 | 87.2 | 89.7 | 89.3 | 91.6 | 92.7 | 94.1 | 96.5 | 102.3 | 112.3 | 116.0 | 115.2 | 107.1 | 149.7 |
| 630 | 88.3 | 88.8 | 90.6 | 90.4 | 92.0 | 94.3 | 95.7 | 98.9 | 104.1 | 113.2 | 117.1 | 113.8 | 104.2 | 150.2 |
| 800 | 90.1 | 88.6 | 91.4 | 92.4 | 93.0 | 95.1 | 97.0 | 100.4 | 106.1 | 114.2 | 118.1 | 112.5 | 102.2 | 150.9 |
| 1000 | 91.4 | 90.5 | 93.0 | 94.1 | 94.1 | 96.7 | 98.4 | 101.8 | 107.7 | 114.1 | 117.4 | 110.4 | 100.3 | 150.4 |
| 1250 | 90.5 | 93.1 | 94.8 | 94.6 | 95.7 | 98.3 | 99.2 | 102.9 | 107.8 | 113.7 | 118.0 | 110.2 | 99.6 | 150.7 |
| 1600 | 92.6 | 91.2 | 93.5 | 94.2 | 95.3 | 98.7 | 100.1 | 104.2 | 109.0 | 113.8 | 118.0 | 109.5 | 100.7 | 150.8 |
| 2000 | 94.5 | 95.5 | 94.8 | 94.6 | 95.7 | 97.8 | 100.4 | 104.6 | 109.8 | 115.1 | 117.3 | 108.6 | 100.1 | 150.9 |
| 2500 | 97.7 | 96.9 | 97.5 | 96.2 | 96.8 | 98.9 | 101.1 | 105.5 | 110.2 | 115.0 | 116.5 | 107.7 | 100.2 | 150.7 |
| 3150 | 101.0 | 100.2 | 99.3 | 98.5 | 98.3 | 100.0 | 101.6 | 106.3 | 111.0 | 114.9 | 114.8 | 108.5 | 100.0 | 150.5 |
| 4000 | 101.4 | 102.2 | 100.7 | 99.0 | 100.3 | 102.0 | 106.7 | 110.4 | 114.3 | 114.5 | 113.2 | 105.1 | 98.3 | 150.4 |
| 5000 | 103.8 | 101.4 | 102.2 | 102.4 | 101.2 | 101.8 | 102.5 | 106.6 | 110.4 | 115.1 | 113.2 | 105.1 | 98.3 | 150.4 |
| 6300 | 99.2 | 99.9 | 102.4 | 102.6 | 103.1 | 104.2 | 103.4 | 107.1 | 110.8 | 111.6 | 111.8 | 104.6 | 97.8 | 150.1 |
| 8000 | 99.1 | 100.1 | 101.2 | 102.5 | 103.6 | 104.2 | 104.0 | 106.4 | 110.7 | 112.8 | 110.5 | 103.6 | 97.1 | 149.9 |
| 10000 | 98.1 | 100.1 | 101.0 | 101.5 | 103.6 | 105.0 | 104.0 | 107.0 | 109.3 | 112.3 | 109.3 | 102.7 | 96.1 | 150.0 |
| 12500 | 96.4 | 98.7 | 99.9 | 101.4 | 102.4 | 104.5 | 103.5 | 105.7 | 107.8 | 110.1 | 106.8 | 101.0 | 95.4 | 149.2 |
| 16000 | 94.5 | 97.0 | 98.8 | 100.8 | 103.2 | 104.6 | 102.8 | 105.0 | 106.4 | 108.5 | 104.6 | 99.2 | 94.1 | 149.5 |
| 20000 | 89.5 | 94.4 | 95.9 | 98.1 | 102.3 | 103.4 | 100.3 | 102.4 | 104.6 | 105.2 | 101.8 | 97.1 | 92.6 | 149.0 |
| 25000 | 86.2 | 89.6 | 93.2 | 94.1 | 96.9 | 100.0 | 97.8 | 98.4 | 102.5 | 100.8 | 97.5 | 93.2 | 91.5 | 148.0 |
| 31500 | 86.4 | 86.1 | 90.1 | 92.5 | 93.5 | 94.0 | 94.2 | 94.8 | 98.6 | 99.0 | 94.7 | 89.1 | 85.9 | 147.5 |
| 40000 | 81.2 | 81.4 | 85.1 | 86.9 | 91.3 | 92.3 | 88.4 | 90.0 | 93.4 | 93.1 | 89.9 | 83.8 | 81.1 | 146.9 |
| 50000 | 74.1 | 74.8 | 77.8 | 81.1 | 83.2 | 84.7 | 83.6 | 83.2 | 88.6 | 86.7 | 84.1 | 78.8 | 75.1 | 145.1 |
| 63000 | 68.6 | 69.0 | 71.3 | 74.5 | 74.8 | 75.9 | 78.0 | 76.2 | 83.5 | 80.1 | 77.4 | 72.6 | 69.8 | 144.0 |
| 80000 | 62.2 | 62.2 | 65.7 | 68.9 | 68.0 | 71.1 | 69.7 | 70.8 | 78.1 | 75.4 | 72.2 | 64.1 | 61.5 | 145.2 |
| GASPL | 109.4 | 110.1 | 111.1 | 111.6 | 112.8 | 114.1 | 114.0 | 117.3 | 121.3 | 126.0 | 127.8 | 123.4 | 117.9 | 163.4 |

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TEST DATE 02-27-78 TAPE NO. N299 IALPHA 3859 TAMB 37.00
LOCATION C41 ANECH CH AERG. RDG. ADH121 PAMB 29.3300 RELHUM 63.80

MODEL TEST POINT 7212 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 118.57 M/SEC (389.0 FPS) FREE-JET SPEED

07/17/79 10.180

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X72120

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 90.4 | 91.6 | 90.5 | 90.3 | 89.3 | 89.5 | 89.8 | 91.3 | 95.0 | 103.0 | 106.3 | 109.7 | 109.9 | 143.0 |
| 315 | 90.3 | 91.6 | 90.5 | 90.3 | 90.2 | 91.3 | 90.4 | 91.4 | 98.7 | 107.9 | 111.3 | 113.1 | 110.4 | 146.5 |
| 400 | 92.0 | 92.0 | 91.3 | 90.2 | 91.0 | 91.9 | 92.3 | 93.4 | 100.3 | 110.0 | 113.7 | 114.4 | 109.9 | 148.2 |
| 500 | 93.0 | 92.8 | 92.5 | 91.0 | 93.5 | 93.0 | 93.2 | 94.6 | 102.1 | 110.8 | 114.9 | 113.7 | 108.8 | 148.6 |
| 630 | 94.1 | 93.4 | 94.5 | 92.6 | 101.4 | 94.7 | 94.0 | 96.7 | 104.4 | 112.1 | 116.4 | 113.6 | 109.4 | 149.8 |
| 800 | 96.4 | 97.3 | 97.1 | 94.9 | 95.0 | 95.6 | 96.1 | 98.3 | 106.4 | 112.5 | 116.4 | 112.7 | 109.9 | 149.9 |
| 1000 | 97.5 | 94.9 | 96.3 | 95.9 | 96.2 | 97.3 | 97.5 | 99.7 | 106.5 | 112.1 | 117.1 | 112.6 | 108.3 | 150.1 |
| 1250 | 98.9 | 96.7 | 97.9 | 96.5 | 97.9 | 99.1 | 98.5 | 100.9 | 108.0 | 112.6 | 117.4 | 112.2 | 110.8 | 150.6 |
| 1600 | 97.9 | 98.4 | 99.8 | 98.2 | 97.7 | 98.7 | 99.6 | 102.6 | 109.0 | 114.0 | 116.8 | 111.3 | 110.1 | 150.7 |
| 2000 | 100.3 | 97.5 | 98.5 | 98.0 | 97.9 | 99.0 | 100.2 | 103.1 | 109.8 | 114.4 | 116.4 | 110.9 | 110.7 | 150.7 |
| 2500 | 100.1 | 100.5 | 99.0 | 98.1 | 99.1 | 100.4 | 101.2 | 104.3 | 111.2 | 114.8 | 115.4 | 112.4 | 111.3 | 151.0 |
| 3150 | 102.5 | 101.2 | 101.1 | 99.2 | 101.0 | 101.9 | 102.2 | 105.6 | 111.1 | 114.7 | 116.3 | 110.3 | 109.9 | 150.9 |
| 4000 | 106.8 | 105.3 | 103.4 | 101.8 | 102.0 | 102.8 | 103.0 | 106.5 | 111.2 | 115.4 | 113.6 | 108.6 | 106.6 | 151.2 |
| 5000 | 106.8 | 106.2 | 106.3 | 104.1 | 105.0 | 104.8 | 103.9 | 106.7 | 111.7 | 114.0 | 112.6 | 108.3 | 106.4 | 151.1 |
| 6300 | 106.4 | 106.8 | 107.1 | 106.6 | 107.1 | 107.2 | 104.9 | 107.2 | 111.7 | 113.4 | 111.4 | 107.4 | 107.7 | 151.5 |
| 8000 | 106.3 | 106.3 | 106.0 | 107.2 | 107.6 | 107.2 | 105.5 | 106.5 | 110.5 | 113.2 | 110.3 | 106.7 | 106.8 | 151.6 |
| 10000 | 106.0 | 106.3 | 106.6 | 107.0 | 107.6 | 108.0 | 105.9 | 107.1 | 109.9 | 111.8 | 109.0 | 106.4 | 108.3 | 151.7 |
| 12500 | 104.7 | 106.0 | 106.1 | 105.7 | 106.4 | 107.5 | 105.5 | 106.3 | 109.4 | 111.2 | 107.9 | 105.8 | 108.3 | 151.8 |
| 16000 | 102.5 | 104.2 | 104.5 | 105.0 | 107.7 | 107.6 | 104.8 | 106.0 | 108.6 | 109.0 | 106.3 | 106.0 | 107.7 | 152.3 |
| 20000 | 102.9 | 104.2 | 104.7 | 105.1 | 106.8 | 106.4 | 102.6 | 103.8 | 107.9 | 106.0 | 103.2 | 101.9 | 106.9 | 152.8 |
| 25000 | 97.2 | 101.0 | 101.1 | 101.8 | 103.4 | 103.0 | 100.3 | 100.3 | 103.5 | 103.6 | 99.9 | 97.8 | 102.0 | 151.7 |
| 31500 | 95.2 | 95.5 | 97.6 | 97.0 | 98.0 | 97.0 | 96.4 | 95.9 | 99.8 | 99.4 | 96.9 | 94.1 | 98.8 | 150.5 |
| 40000 | 92.5 | 91.1 | 93.7 | 94.6 | 95.9 | 95.3 | 90.8 | 91.5 | 95.2 | 93.0 | 91.1 | 89.2 | 92.9 | 150.6 |
| 50000 | 87.0 | 86.0 | 88.3 | 88.6 | 87.7 | 87.7 | 86.0 | 84.6 | 91.0 | 87.4 | 85.4 | 84.0 | 86.5 | 149.0 |
| 63000 | 79.0 | 78.5 | 80.1 | 81.9 | 78.8 | 78.9 | 80.3 | 77.6 | 85.9 | 82.7 | 79.7 | 74.5 | 78.7 | 147.6 |
| 80000 | 69.3 | 68.9 | 70.5 | 72.7 | 72.5 | 74.1 | 71.5 | 71.2 | 76.0 | 72.9 | 69.9 | 64.7 | 68.8 | 145.8 |
| GASPL | 115.7 | 115.8 | 116.1 | 115.6 | 116.6 | 116.8 | 116.1 | 117.0 | 121.9 | 125.5 | 127.1 | 124.0 | 122.4 | 164.6 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | REFRACTION CORRECTION - YES |
|------------------------------|------------------------------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | TAPE NO. | ALPHA | TAPB |
|--------------|------------|---------|--------|
| 02-27-78 | N299 | 3839 | 37.00 |
| LOCATION | AERO. RDG. | PAPB | RELHUM |
| 041 ANECH CH | ADH121 | 29.3300 | 53.60 |

| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
|-------|------------|-----------------------|------------------------------------|---------------------------|
| 7200 | 7212 | 12.2 M (40.0 FT) ARC | 154.7 SQ CH (23.99 SQ IN) - MODEL | 118.57 M/SEC (389.0 FPS) |

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X72121

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 70.2 | 71.7 | 72.2 | 71.7 | 72.9 | 74.0 | 74.2 | 75.0 | 81.1 | 89.7 | 91.9 | 90.4 | 82.6 | 165.9 |
| 63 | 71.2 | 72.5 | 73.3 | 72.6 | 75.4 | 75.1 | 75.1 | 76.1 | 82.9 | 90.5 | 93.1 | 89.7 | 81.4 | 166.3 |
| 80 | 72.3 | 73.1 | 75.3 | 74.1 | 83.3 | 76.8 | 76.7 | 76.2 | 85.2 | 91.8 | 94.6 | 89.5 | 81.9 | 167.5 |
| 100 | 76.5 | 76.9 | 77.8 | 76.3 | 76.6 | 77.6 | 77.9 | 79.7 | 87.1 | 92.1 | 94.5 | 88.5 | 82.3 | 167.5 |
| 125 | 75.5 | 74.4 | 76.9 | 77.2 | 78.0 | 79.2 | 79.3 | 81.1 | 87.2 | 91.7 | 95.0 | 88.2 | 81.5 | 167.8 |
| 160 | 76.6 | 76.1 | 78.4 | 77.8 | 79.6 | 80.9 | 80.2 | 82.2 | 88.5 | 92.0 | 95.2 | 87.6 | 82.6 | 168.3 |
| 200 | 75.5 | 78.5 | 80.1 | 79.3 | 79.2 | 81.3 | 81.2 | 83.6 | 89.3 | 93.2 | 94.3 | 86.3 | 81.4 | 168.4 |
| 250 | 77.5 | 78.4 | 78.6 | 78.8 | 79.2 | 80.4 | 81.5 | 83.9 | 89.9 | 93.3 | 93.6 | 85.5 | 81.4 | 168.4 |
| 315 | 76.8 | 79.1 | 78.8 | 78.6 | 80.1 | 81.6 | 82.2 | 84.9 | 90.9 | 93.3 | 92.1 | 85.5 | 81.1 | 168.7 |
| 400 | 78.7 | 79.3 | 80.5 | 79.4 | 81.7 | 82.8 | 82.9 | 85.9 | 90.5 | 92.8 | 91.5 | 83.8 | 78.8 | 168.6 |
| 500 | 82.6 | 83.0 | 82.5 | 81.7 | 82.4 | 83.4 | 83.5 | 86.4 | 90.3 | 93.1 | 89.6 | 81.4 | 75.5 | 168.8 |
| 630 | 82.1 | 83.6 | 85.1 | 83.8 | 85.1 | 85.2 | 84.1 | 86.4 | 90.4 | 91.4 | 87.9 | 80.4 | 75.2 | 168.8 |
| 800 | 81.2 | 83.8 | 85.5 | 86.0 | 87.1 | 87.3 | 84.8 | 86.6 | 90.4 | 86.2 | 86.2 | 78.9 | 73.4 | 169.1 |
| 1000 | 80.7 | 83.0 | 86.2 | 86.4 | 87.4 | 87.2 | 85.3 | 85.7 | 88.7 | 89.9 | 84.7 | 77.4 | 71.3 | 169.2 |
| 1250 | 79.9 | 82.7 | 84.6 | 86.0 | 87.2 | 85.6 | 86.1 | 87.9 | 88.1 | 82.6 | 76.4 | 71.4 | 69.3 | 169.3 |
| 1600 | 77.7 | 81.7 | 83.6 | 84.4 | 85.8 | 87.1 | 84.9 | 85.0 | 87.3 | 86.9 | 80.8 | 74.4 | 69.0 | 169.5 |
| 2000 | 74.5 | 79.3 | 81.7 | 83.5 | 86.9 | 87.1 | 84.0 | 84.5 | 85.8 | 84.1 | 78.3 | 71.9 | 65.4 | 170.0 |
| 2500 | 73.1 | 78.2 | 81.0 | 82.9 | 85.5 | 85.3 | 81.3 | 81.7 | 84.3 | 80.0 | 73.4 | 66.0 | 59.6 | 170.5 |
| 3150 | 64.1 | 72.5 | 75.5 | 78.1 | 80.7 | 80.6 | 77.6 | 76.6 | 78.0 | 75.1 | 66.8 | 67.0 | 46.4 | 169.3 |
| 4000 | 55.8 | 62.2 | 68.2 | 70.0 | 72.3 | 71.7 | 70.7 | 68.9 | 70.4 | 66.2 | 57.5 | 44.4 | 28.7 | 168.1 |
| 5000 | 43.4 | 50.3 | 58.0 | 62.2 | 65.2 | 63.1 | 60.1 | 59.1 | 59.6 | 52.2 | 41.9 | 25.8 | 1.0 | 168.2 |
| 6300 | 20.1 | 31.0 | 40.7 | 45.4 | 48.9 | 47.6 | 45.2 | 41.3 | 43.3 | 32.4 | 18.4 | | | 166.7 |
| 8000 | | | 11.1 | 19.4 | 19.9 | 21.1 | 21.4 | 15.1 | 16.8 | 2.8 | | | | 165.2 |
| 10000 | | | | | | | | | | | | | | 163.4 |

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GASPL 90.7 92.6 94.3 94.7 96.4 96.7 95.1 96.6 100.9 103.7 104.2 98.3 92.0 182.1
 PWL 97.7 101.1 103.5 104.6 106.8 106.9 104.7 105.5 108.6 109.3 107.4 100.7 94.7
 PNLT 98.9 101.6 104.2 105.1 108.0 109.1 104.7 105.5 109.2 109.8 107.4 100.7 95.8

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 37.00
 LOCATION C41 ANECH CH AERO. RDG. ADH121 PAMB 29.3300 RELHUM 53.60

MODEL TEST POINT 7212 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 118.57 M/SEC (389.0 FPS)
 7200 FREE-JET SPEED

07/19/79 18.682

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG E, 70 PERCENT R.H. STD. DAY, 88 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-MOOL X73010
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PM

50

63

80

100

125

160

200

250

313

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

104.2

105.9

106.0

106.2

106.1

109.3

110.6

113.1

116.4

121.3

124.8

125.7

122.8

160.5

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TEST DATE 02-20-78
LOCATION C41 ANEC# 3H
TAPE NO. N294
AERO. RDG. ADH072
ALPHA 5859
PAPB 29.1940
TAPB 30.56
RELHUM 17.90

MODEL TEST POINT 7301
ACUSTIC RANGE 12.2 M (40.0 FT) ARC
154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED 0. M/SEC (0. FPS)

07/19/79 18.682

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
 59.0 DEG F 70 PERCENT RH STD DAY SR 40.0 FT ARC

IDENTIFICATION - FJ-ZER-FMODL X73010

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | | | | | | | | | | | | | | |
| 315 | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | | |
| 630 | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | |
| 1000 | | | | | | | | | | | | | | |
| 1250 | | | | | | | | | | | | | | |
| 1600 | | | | | | | | | | | | | | |
| 2000 | | | | | | | | | | | | | | |
| 2500 | | | | | | | | | | | | | | |
| 3150 | | | | | | | | | | | | | | |
| 4000 | | | | | | | | | | | | | | |
| 5000 | | | | | | | | | | | | | | |
| 6300 | | | | | | | | | | | | | | |
| 8000 | | | | | | | | | | | | | | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |
| GASPL | 104.2 | 105.9 | 106.0 | 105.2 | 108.1 | 109.3 | 110.6 | 113.1 | 118.4 | 121.3 | 124.8 | 125.7 | 122.8 | 160.5 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | REFRACTION CORRECTION - YES |
|------------------------------|------------------------------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | TAPE NO | TAPE NO | TAPE NO | TAPE NO |
|-----------------------|------------|---------|---------|---------|
| 02-20-78 | N294 | ADH072 | ADH072 | ADH072 |
| LOCATION C41 ANECH CH | AERO. RDG. | ADH072 | ADH072 | ADH072 |
| ALPHA SB59 | PAMB | 29.1940 | RELHUM | 17.90 |

| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
|-------|------------|-----------------------|------------------------------------|--------------------|
| 7300 | 7301 | 12.2 M (40.0 FT) ARC | 154.7 SQ CM (23.99 SQ IN) - MODEL | 0. M/SEC (0. FPS) |
| 620 | | | | |

07/19/79 18.682

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB, 2400.0 FT., SL

IDENTIFICATION - FJ-ZER-FMODL X73011

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 64.1 | 68.5 | 69.3 | 69.8 | 72.3 | 74.3 | 75.3 | 77.1 | 83.3 | 89.3 | 91.2 | 90.1 | 84.2 | 165.8 |
| 63 | 65.2 | 69.3 | 71.6 | 71.6 | 74.9 | 75.4 | 76.9 | 78.4 | 84.4 | 90.6 | 92.0 | 90.9 | 84.7 | 166.6 |
| 80 | 66.0 | 70.4 | 71.7 | 72.5 | 82.5 | 76.5 | 77.7 | 80.0 | 86.0 | 91.0 | 92.8 | 91.5 | 85.5 | 167.4 |
| 100 | 69.7 | 71.1 | 72.7 | 74.7 | 75.7 | 77.7 | 79.7 | 81.5 | 87.5 | 91.4 | 93.5 | 92.2 | 86.4 | 168.2 |
| 125 | 74.0 | 76.1 | 77.0 | 77.0 | 77.0 | 79.0 | 80.0 | 82.2 | 87.7 | 90.5 | 92.5 | 91.6 | 86.0 | 167.7 |
| 160 | 69.7 | 74.8 | 76.0 | 77.7 | 78.8 | 81.3 | 81.0 | 83.5 | 88.4 | 89.2 | 92.7 | 92.2 | 85.0 | 168.0 |
| 200 | 71.8 | 72.5 | 74.7 | 76.0 | 77.5 | 80.0 | 81.2 | 83.7 | 88.4 | 89.4 | 92.2 | 91.0 | 83.2 | 167.6 |
| 250 | 72.1 | 76.1 | 78.5 | 76.3 | 76.1 | 78.6 | 80.1 | 83.3 | 87.9 | 88.2 | 90.2 | 87.9 | 79.6 | 166.0 |
| 315 | 70.3 | 73.4 | 74.9 | 76.4 | 77.2 | 79.2 | 81.2 | 82.7 | 87.5 | 88.5 | 89.6 | 86.7 | 76.9 | 165.8 |
| 400 | 70.8 | 74.0 | 74.0 | 75.1 | 76.8 | 78.4 | 80.9 | 82.6 | 87.4 | 86.3 | 88.4 | 83.8 | 74.9 | 164.9 |
| 500 | 68.5 | 71.3 | 73.4 | 73.8 | 75.6 | 77.6 | 79.6 | 82.3 | 85.8 | 85.2 | 86.4 | 81.1 | 71.9 | 163.7 |
| 630 | 66.8 | 69.7 | 71.4 | 73.1 | 75.4 | 77.4 | 79.1 | 81.3 | 85.0 | 84.4 | 84.2 | 79.0 | 70.1 | 162.9 |
| 800 | 65.0 | 69.0 | 71.5 | 73.0 | 74.8 | 77.3 | 78.6 | 80.5 | 83.9 | 82.6 | 81.8 | 77.8 | 63.2 | 162.2 |
| 1000 | 62.7 | 68.8 | 70.7 | 71.9 | 74.3 | 76.9 | 77.5 | 79.2 | 82.6 | 80.7 | 80.0 | 75.6 | 66.9 | 161.3 |
| 1250 | 61.0 | 67.3 | 68.6 | 71.3 | 73.8 | 76.4 | 76.3 | 78.5 | 81.0 | 78.8 | 77.8 | 73.3 | 63.5 | 160.5 |
| 1600 | 57.4 | 65.7 | 67.7 | 70.3 | 73.0 | 74.8 | 74.8 | 76.0 | 77.7 | 76.4 | 74.6 | 70.1 | 60.7 | 159.4 |
| 2000 | 54.7 | 63.3 | 66.4 | 69.3 | 72.5 | 74.0 | 72.7 | 74.3 | 75.4 | 74.0 | 71.1 | 66.8 | 55.8 | 159.1 |
| 2500 | 47.9 | 59.6 | 62.5 | 65.7 | 70.8 | 71.7 | 69.5 | 70.8 | 71.3 | 69.4 | 65.9 | 60.4 | 48.3 | 157.9 |
| 3150 | 43.1 | 53.2 | 57.9 | 60.4 | 66.5 | 67.3 | 65.5 | 64.2 | 66.2 | 62.0 | 58.5 | 51.3 | 36.9 | 156.6 |
| 4000 | 35.6 | 44.3 | 51.8 | 56.1 | 58.3 | 59.2 | 58.5 | 58.1 | 58.4 | 55.5 | 49.3 | 38.7 | 17.0 | 156.2 |
| 5000 | 20.9 | 32.2 | 40.8 | 45.5 | 51.5 | 52.3 | 48.1 | 47.3 | 47.8 | 42.5 | 35.2 | 19.3 | | 155.8 |
| 6300 | | 11.3 | 21.1 | 28.8 | 33.5 | 35.5 | 32.7 | 29.7 | 30.9 | 21.5 | 11.7 | | | 154.1 |
| 8000 | | | | | | | | | | | | | | 153.1 |
| 10000 | | | | | | | | | | | | | | 154.1 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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|-------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|------|-------|
| GASPL | 81.0 | 84.3 | 85.6 | 86.6 | 89.0 | 90.2 | 91.3 | 93.5 | 98.1 | 100.1 | 102.0 | 100.6 | 94.0 | 177.9 |
| PNL | 84.6 | 89.0 | 90.7 | 92.6 | 95.6 | 97.0 | 97.2 | 98.9 | 103.0 | 103.2 | 104.2 | 101.8 | 93.7 | |
| PNLT | 85.3 | 89.6 | 90.7 | 93.1 | 96.8 | 98.1 | 97.2 | 98.9 | 103.5 | 103.2 | 105.2 | 101.8 | 93.7 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAPB 30.86
LOCATION C41 ANECH CH AERO. RDG. ADH072 PAMB 29.1940 RELHUM 17.90

MODEL TEST POINT 7301 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 0. FREE-JET SPEED 0. FPS

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X73020
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50
63
80

100
125
160
200

250 78.8 81.3 81.0 82.7 83.0 85.3 87.0 89.5 94.5 99.6 104.3 107.0 108.1 140.3
315 80.6 81.8 82.8 82.7 83.8 86.8 87.1 89.6 96.4 101.2 106.1 108.3 108.7 141.2
400 82.3 83.0 83.7 83.6 84.6 87.0 88.4 90.6 97.7 105.5 108.4 109.1 103.5 143.0
500 82.4 83.1 84.8 84.9 87.8 88.4 89.6 92.0 99.0 106.6 110.0 108.9 100.1 143.8
630 83.8 84.3 85.5 85.8 86.8 89.8 90.9 94.1 101.1 106.7 110.1 107.0 96.4 143.7
800 85.6 84.1 86.1 87.6 88.0 90.6 92.0 95.7 102.9 107.5 109.9 105.0 94.4 143.7
1000 86.2 85.4 87.2 87.8 88.8 92.2 93.4 96.5 103.5 106.8 108.0 101.4 92.3 142.6
1250 85.0 87.1 88.6 88.9 90.2 93.3 94.0 97.4 104.0 106.5 107.6 99.5 90.6 142.4
1600 86.9 86.0 87.8 89.0 90.4 93.5 94.6 98.1 104.4 106.1 106.3 98.0 89.8 142.0
2000 85.8 86.1 87.9 88.1 89.7 92.6 94.5 98.4 104.8 106.2 104.4 96.4 89.4 141.7
2500 86.3 86.8 87.5 88.8 90.1 93.5 95.4 98.8 104.5 106.4 103.6 95.6 89.1 141.7
3150 85.9 86.9 88.1 89.4 90.7 93.8 95.5 99.4 105.1 105.0 102.7 97.1 88.6 141.4
4000 85.7 85.3 88.0 88.3 89.8 93.2 95.1 98.5 103.7 104.5 102.8 96.2 88.2 140.8
5000 85.9 86.2 87.7 89.0 90.3 93.1 95.5 99.2 103.7 104.4 101.8 96.4 88.4 140.8
6300 85.7 86.3 87.6 88.3 90.1 93.9 94.9 98.6 103.0 103.3 100.8 95.5 88.2 140.3
8000 87.1 87.6 87.9 88.0 90.1 93.0 94.3 97.4 101.8 102.0 99.8 94.1 87.9 139.6
10000 86.1 88.0 88.2 88.0 90.1 93.5 93.6 96.9 100.8 101.1 98.2 93.7 87.1 139.4
12500 85.2 87.4 87.8 88.1 89.4 91.8 92.0 95.1 98.0 98.6 96.0 92.2 87.0 138.1
16000 82.5 85.5 87.4 87.9 89.6 91.6 90.0 93.7 95.9 97.4 93.7 90.9 85.1 138.0
20000 78.0 83.1 83.7 85.7 89.0 90.3 88.0 90.8 93.0 93.5 90.1 88.4 83.8 137.0
25000 77.3 79.2 81.7 81.8 86.1 88.0 85.1 86.1 90.0 89.1 86.9 84.8 82.6 136.0
31500 76.3 76.3 79.7 80.8 81.1 82.4 81.8 82.6 86.0 86.6 83.6 79.6 76.9 135.5
40000 71.6 71.7 74.7 75.9 79.6 80.6 76.6 77.9 80.7 80.1 78.3 74.1 72.0 135.0
50000 65.2 65.8 67.5 70.5 71.9 73.4 71.8 70.8 76.8 72.9 71.9 68.8 66.0 133.3
63000 60.4 60.6 62.2 64.3 64.2 65.3 66.6 64.5 71.6 65.6 65.1 62.3 60.3 132.4
80000 54.8 54.7 57.2 60.9 58.8 61.0 59.5 58.2 64.3 58.9 58.8 53.7 51.9 133.1

QASPL 97.9 98.8 100.0 100.7 103.2 105.1 106.2 109.6 115.1 117.6 118.6 116.5 111.1 154.7

TEST DATE 02-27-78 TAPE NO. N299 IALPHA SB59 TAMB 28.94
LOCATION C41 ANECH CH AERO. RDG. ADH982 PAYB 29.5700 RELHUM 43.40

MODEL TEST POINT 7302 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.65 M/SEC (396.0 FPS)
FREE-JET SPEED

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FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X73020

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

10000000

12500000

16000000

20000000

25000000

31500000

40000000

50000000

63000000

80000000

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OF POOR QUALITY

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 386.00 REFRACTION CORRECTION - YES FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 5859 TAMB 28.94 LOCATION C41 ANECH CH AERO. RDG. ADH992 PAMB 29.5700 RELNUM 43.40

MODEL TEST POINT 7302 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.65 M/SEC (386.0 FPS) SIZE FREE-JET SPEED

93

MODEL TEST POINT 7302 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.65 M/SEC (386.0 FPS) SIZE FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X73021

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 66.0 | 67.4 | 68.1 | 67.5 | 66.2 | 69.4 | 69.6 | 70.5 | 77.7 | 83.6 | 85.7 | 84.0 | 76.4 | 159.7 |
| 63 | 66.6 | 68.0 | 68.7 | 68.0 | 71.6 | 70.6 | 70.5 | 71.4 | 79.8 | 83.9 | 85.9 | 82.7 | 73.5 | 159.6 |
| 80 | 67.9 | 69.0 | 70.3 | 69.8 | 81.1 | 72.2 | 71.6 | 73.4 | 81.9 | 85.0 | 86.2 | 81.8 | 73.9 | 160.3 |
| 100 | 71.9 | 72.3 | 72.7 | 71.7 | 71.6 | 73.1 | 72.9 | 74.9 | 82.8 | 84.7 | 84.8 | 79.2 | 74.0 | 159.5 |
| 125 | 70.9 | 69.8 | 71.6 | 72.4 | 72.7 | 74.7 | 74.3 | 75.8 | 83.2 | 84.2 | 84.1 | 76.6 | 71.4 | 159.0 |
| 160 | 71.3 | 71.0 | 72.6 | 72.2 | 74.1 | 75.9 | 74.9 | 76.6 | 83.7 | 83.8 | 82.8 | 75.1 | 70.0 | 158.8 |
| 200 | 69.9 | 72.5 | 73.9 | 73.5 | 74.2 | 76.1 | 75.6 | 77.3 | 84.2 | 84.1 | 81.0 | 73.5 | 69.4 | 158.6 |
| 250 | 71.4 | 71.1 | 72.9 | 73.6 | 73.6 | 75.2 | 75.5 | 77.7 | 84.0 | 84.4 | 80.2 | 73.6 | 68.9 | 159.0 |
| 315 | 69.9 | 71.0 | 72.8 | 72.5 | 74.0 | 76.2 | 76.5 | 78.2 | 84.7 | 83.1 | 79.4 | 74.2 | 68.2 | 159.2 |
| 400 | 68.8 | 71.3 | 72.2 | 73.1 | 74.5 | 76.6 | 76.7 | 78.8 | 83.7 | 82.8 | 79.7 | 73.2 | 67.3 | 159.3 |
| 500 | 68.9 | 71.0 | 72.6 | 73.5 | 73.8 | 76.2 | 76.6 | 78.3 | 83.5 | 82.5 | 79.2 | 72.8 | 66.5 | 159.4 |
| 630 | 68.2 | 70.1 | 72.3 | 72.4 | 74.4 | 76.5 | 77.2 | 79.0 | 82.7 | 81.1 | 76.9 | 71.4 | 65.6 | 159.2 |
| 800 | 67.8 | 69.7 | 71.8 | 73.1 | 74.5 | 77.0 | 76.4 | 78.1 | 81.5 | 79.8 | 75.8 | 69.9 | 65.1 | 158.9 |
| 1000 | 69.7 | 71.5 | 73.0 | 73.2 | 73.8 | 75.9 | 75.8 | 76.9 | 80.7 | 79.0 | 74.3 | 69.4 | 63.8 | 158.9 |
| 1250 | 67.8 | 70.1 | 71.3 | 71.5 | 73.7 | 76.3 | 75.2 | 76.5 | 78.6 | 77.3 | 72.8 | 68.4 | 63.4 | 158.6 |
| 1600 | 65.8 | 69.6 | 70.8 | 70.8 | 72.7 | 74.3 | 73.5 | 74.8 | 76.9 | 76.4 | 70.6 | 66.7 | 61.0 | 158.6 |
| 2000 | 63.2 | 67.9 | 69.5 | 70.2 | 72.6 | 74.0 | 71.5 | 73.4 | 74.7 | 73.0 | 66.8 | 62.9 | 55.9 | 158.2 |
| 2500 | 58.3 | 64.4 | 67.8 | 68.9 | 72.2 | 72.2 | 69.1 | 70.4 | 69.3 | 65.6 | 59.9 | 54.7 | 47.8 | 157.2 |
| 3150 | 52.5 | 61.2 | 63.3 | 65.7 | 67.9 | 68.6 | 63.6 | 62.4 | 66.3 | 63.8 | 56.6 | 47.9 | 37.2 | 157.5 |
| 4000 | 44.8 | 51.7 | 56.7 | 57.7 | 59.4 | 60.1 | 58.5 | 57.3 | 57.4 | 52.6 | 44.7 | 32.9 | 17.0 | 155.9 |
| 5000 | 30.6 | 36.2 | 46.0 | 49.4 | 53.4 | 53.4 | 47.9 | 46.6 | 48.5 | 39.0 | 29.6 | 16.1 | | 156.3 |
| 6300 | 10.3 | 21.2 | 30.2 | 34.3 | 35.6 | 35.4 | 33.2 | 29.4 | 31.6 | 17.9 | 5.5 | | | 155.3 |
| 8000 | | | 0.7 | 8.7 | 9.2 | 10.5 | 9.8 | 3.3 | 5.3 | | | | | 154.3 |
| 10000 | | | | | | | | | | | | | | 153.1 |

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|-------|------|------|------|------|------|------|------|------|-------|-------|------|------|------|-------|
| OASPL | 81.4 | 82.6 | 84.3 | 84.5 | 87.0 | 87.7 | 87.3 | 88.8 | 94.5 | 95.0 | 94.1 | 89.6 | 82.5 | 172.2 |
| PNL | 86.8 | 90.1 | 92.0 | 92.8 | 95.2 | 96.1 | 94.5 | 96.0 | 99.8 | 99.2 | 96.0 | 90.1 | 83.6 | |
| PNLT | 86.8 | 90.1 | 92.6 | 93.4 | 96.5 | 97.2 | 94.5 | 96.0 | 100.4 | 100.2 | 97.1 | 90.1 | 84.6 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -5

| | | | | | | | |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | 3859 | TAMS | 28.94 |
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH992 | PAMB | 29.5700 | RELHUM | 43.40 |

| | | | | |
|-------|------------|-------------------------|-------------------------------------|---------------------------|
| MODEL | TEST POINT | ACQUSTIC RANGE | SIZE | FREE-JET SPEED |
| 7300 | 7302 | 731.5 M (2400.0 FT) SL | 9032.2 SQ CM (1400.00 SQ IN) - FULL | 117.65 M/SEC (386.0 FPS) |

07/19/79 10.692

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F. 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X73030
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PUL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

103.7

105.8

106.1

106.5

108.2

109.6

110.9

113.6

118.9

121.4

123.9

125.2

123.3

160.4

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TEST DATE 02-20-78
LOCATION C41 ANECH CH

TAPE NO. N294
AERO. RDG. ADH074

IALPHA SB59
PAMB 29.2980

TAMB 30.29
RELHUM 18.50

MODEL TEST POINT
7300 7303

ACCUSTIC RANGE
12.2 M (40.0 FT) ARC

SIZE
154.7 SQ CH (23.99 SQ IN) - MODEL

FREE-JET SPEED
0. M/SEC (0. FPS)

07/19/79 10.602

62
26

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X73030

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 63.3 | 66.6 | 67.1 | 67.1 | 66.2 | 60.6 | 93.0 | 94.4 | 99.3 | 103.7 | 106.0 | 111.0 | 110.6 | 144.4 |
| 315 | 64.9 | 67.7 | 67.7 | 68.5 | 60.6 | 91.9 | 93.1 | 95.0 | 100.9 | 105.5 | 109.4 | 112.6 | 110.7 | 145.7 |
| 400 | 66.2 | 68.7 | 68.5 | 68.3 | 60.1 | 92.5 | 94.1 | 95.8 | 102.2 | 109.0 | 111.9 | 114.1 | 112.0 | 147.6 |
| 500 | 67.0 | 69.3 | 69.3 | 69.1 | 62.2 | 93.8 | 94.9 | 96.9 | 103.6 | 110.1 | 113.3 | 114.9 | 112.4 | 148.6 |
| 630 | 67.9 | 69.7 | 69.7 | 69.7 | 61.2 | 94.8 | 95.9 | 96.3 | 99.0 | 105.4 | 110.3 | 113.6 | 113.5 | 149.2 |
| 800 | 61.7 | 61.2 | 62.0 | 62.5 | 63.6 | 95.7 | 97.4 | 100.0 | 106.7 | 110.8 | 113.7 | 115.1 | 114.0 | 149.4 |
| 1000 | 63.8 | 64.3 | 65.4 | 64.4 | 65.0 | 96.8 | 98.7 | 100.9 | 107.9 | 110.2 | 112.8 | 115.0 | 114.1 | 149.3 |
| 1250 | 61.4 | 65.0 | 65.5 | 65.5 | 66.1 | 98.2 | 99.3 | 102.0 | 107.9 | 110.1 | 112.9 | 115.1 | 113.5 | 149.3 |
| 1600 | 63.0 | 63.1 | 63.9 | 64.2 | 66.0 | 98.1 | 99.7 | 102.4 | 108.5 | 110.5 | 112.7 | 114.9 | 113.1 | 149.3 |
| 2000 | 63.2 | 63.5 | 64.7 | 64.7 | 65.3 | 97.4 | 99.3 | 102.2 | 108.4 | 110.6 | 112.0 | 113.7 | 111.0 | 148.6 |
| 2500 | 63.0 | 64.3 | 64.4 | 65.4 | 66.2 | 97.6 | 99.9 | 102.9 | 108.0 | 110.7 | 112.6 | 112.3 | 109.1 | 148.3 |
| 3150 | 63.5 | 65.6 | 64.6 | 65.3 | 66.2 | 98.3 | 100.2 | 103.3 | 108.2 | 109.0 | 111.9 | 110.6 | 107.6 | 147.5 |
| 4000 | 63.3 | 64.6 | 63.8 | 64.1 | 65.4 | 97.3 | 99.4 | 102.8 | 107.7 | 108.2 | 110.9 | 108.8 | 105.8 | 146.6 |
| 5000 | 62.6 | 63.9 | 64.1 | 64.1 | 65.3 | 97.6 | 99.5 | 102.8 | 106.8 | 108.0 | 109.7 | 107.9 | 105.1 | 146.1 |
| 6300 | 61.2 | 64.6 | 65.3 | 64.3 | 65.6 | 98.0 | 99.7 | 102.1 | 106.2 | 107.2 | 108.0 | 106.6 | 104.5 | 145.5 |
| 8000 | 60.3 | 63.4 | 64.3 | 65.4 | 66.0 | 97.1 | 98.7 | 100.8 | 105.4 | 105.5 | 106.4 | 105.3 | 103.4 | 144.6 |
| 10000 | 60.4 | 62.7 | 63.9 | 64.0 | 66.4 | 98.0 | 97.7 | 100.5 | 103.6 | 104.2 | 104.7 | 104.8 | 102.0 | 144.1 |
| 12500 | 64.9 | 61.0 | 62.4 | 63.1 | 65.1 | 96.8 | 96.5 | 98.6 | 101.2 | 101.9 | 102.4 | 102.3 | 100.0 | 142.8 |
| 16000 | 63.9 | 69.6 | 61.2 | 62.3 | 64.5 | 96.0 | 95.0 | 97.1 | 99.2 | 100.1 | 100.3 | 100.9 | 98.4 | 142.6 |
| 20000 | 78.4 | 66.9 | 67.9 | 69.1 | 63.4 | 94.0 | 92.1 | 94.2 | 86.5 | 97.0 | 97.5 | 97.8 | 95.5 | 141.7 |
| 25000 | 77.2 | 62.5 | 64.8 | 66.1 | 60.8 | 91.7 | 89.5 | 89.2 | 83.8 | 92.8 | 93.2 | 93.9 | 93.0 | 140.6 |
| 31500 | 75.3 | 79.3 | 62.5 | 64.7 | 66.0 | 86.3 | 85.7 | 86.7 | 82.8 | 90.5 | 90.7 | 89.0 | 87.6 | 140.1 |
| 40000 | 70.3 | 73.7 | 77.7 | 79.9 | 64.2 | 84.4 | 80.5 | 81.7 | 84.9 | 84.8 | 85.8 | 83.2 | 83.5 | 139.7 |
| 50000 | 63.6 | 67.6 | 70.0 | 73.5 | 76.8 | 77.5 | 77.0 | 75.1 | 81.1 | 78.3 | 79.9 | 78.0 | 77.9 | 138.3 |
| 63000 | 58.0 | 61.4 | 64.2 | 67.4 | 68.5 | 69.7 | 72.0 | 69.6 | 76.6 | 71.0 | 73.6 | 73.2 | 72.8 | 137.9 |
| 80000 | 51.3 | 54.2 | 57.7 | 61.5 | 61.7 | 62.9 | 63.4 | 63.3 | 70.1 | 65.9 | 69.7 | 66.4 | 64.4 | 138.4 |
| OASPL | 103.7 | 105.8 | 106.1 | 106.5 | 108.2 | 109.6 | 110.9 | 113.6 | 118.9 | 121.4 | 123.9 | 125.2 | 123.3 | 160.4 |

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| MODEL/FEUL | SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | REFRACTION CORRECTION - YES |
|-------------|-------------------|------------------------------|-----------------------------|
| INPUT 1.000 | CALC. 1.000 | FREE JET DIAMETER (IN) 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 02-20-78 | TAPE NO. | N294 | ALPHA | SB59 | TAMB | 30.29 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERG. RDG. | ADH074 | PANB | 29.2960 | RELHUM | 16.50 |

| MODEL | TEST POINT | ACUSTIC RANGE | SIZE | FREE-JET SPEED |
|-------|------------|-----------------------|------------------------------------|--------------------|
| 7303 | 7303 | 12.2 M (40.0 FT) ARC | 154.7 SQ CM (23.99 SQ IN) - MODEL | 0. M/SEC (0. FPS) |

07/19/79 18.882

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F. 70 PERCENT R.H. STD. DAY. SB. 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X73031

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 50 | 64.4 | 68.5 | 69.3 | 69.8 | 72.1 | 74.8 | 76.1 | 77.3 | 83.1 | 88.8 | 90.2 | 90.1 | 84.7 | 165.3 |
| 63 | 65.2 | 69.0 | 71.1 | 71.6 | 74.1 | 75.9 | 76.9 | 78.4 | 84.4 | 89.9 | 91.5 | 90.9 | 85.0 | 166.3 |
| 80 | 66.0 | 70.4 | 71.5 | 72.7 | 74.0 | 75.5 | 77.0 | 78.2 | 80.5 | 86.2 | 90.0 | 91.8 | 86.0 | 166.8 |
| 100 | 69.7 | 70.8 | 72.7 | 74.0 | 75.5 | 77.7 | 79.2 | 81.5 | 87.5 | 90.4 | 91.8 | 90.9 | 86.4 | 167.1 |
| 125 | 71.7 | 73.9 | 76.0 | 75.7 | 78.7 | 78.7 | 80.5 | 82.2 | 88.5 | 89.7 | 90.7 | 90.6 | 86.3 | 166.9 |
| 160 | 69.2 | 74.3 | 75.5 | 76.7 | 77.3 | 80.0 | 81.0 | 83.2 | 88.4 | 89.4 | 90.7 | 90.5 | 85.3 | 167.0 |
| 200 | 70.5 | 72.3 | 74.2 | 75.2 | 77.5 | 79.7 | 81.2 | 83.5 | 88.9 | 89.7 | 90.2 | 90.0 | 84.4 | 167.0 |
| 250 | 70.3 | 74.3 | 74.8 | 75.6 | 76.6 | 78.9 | 80.6 | 83.1 | 88.4 | 89.5 | 89.2 | 88.4 | 81.6 | 166.3 |
| 315 | 69.8 | 72.9 | 74.1 | 75.8 | 77.2 | 78.7 | 81.0 | 83.4 | 87.8 | 89.3 | 89.4 | 86.4 | 78.9 | 166.0 |
| 400 | 69.8 | 73.7 | 74.0 | 75.6 | 76.9 | 79.2 | 80.9 | 83.6 | 87.7 | 87.1 | 88.1 | 84.0 | 76.4 | 165.2 |
| 500 | 69.1 | 72.3 | 72.9 | 74.1 | 75.9 | 77.9 | 79.9 | 82.8 | 86.8 | 86.0 | 86.7 | 81.6 | 73.7 | 164.3 |
| 630 | 67.8 | 71.2 | 72.9 | 73.8 | 75.6 | 77.9 | 79.5 | 82.3 | 85.6 | 85.4 | 85.0 | 80.0 | 71.9 | 163.7 |
| 800 | 66.0 | 71.6 | 73.8 | 73.7 | 75.6 | 78.1 | 79.6 | 81.5 | 84.7 | 84.2 | 82.8 | 78.0 | 70.2 | 163.1 |
| 1000 | 64.7 | 70.1 | 72.5 | 74.6 | 75.6 | 77.1 | 78.5 | 80.0 | 83.7 | 82.2 | 80.7 | 76.1 | 67.9 | 162.3 |
| 1250 | 62.3 | 69.1 | 71.9 | 73.1 | 76.0 | 77.9 | 77.3 | 79.5 | 81.8 | 80.6 | 79.6 | 74.8 | 65.0 | 161.8 |
| 1600 | 57.9 | 66.8 | 70.0 | 71.8 | 74.5 | 76.4 | 75.6 | 77.3 | 78.7 | 77.6 | 75.4 | 70.8 | 60.7 | 160.5 |
| 2000 | 56.0 | 64.8 | 69.4 | 70.8 | 73.7 | 75.5 | 74.2 | 75.5 | 76.4 | 75.3 | 72.3 | 67.9 | 56.1 | 160.3 |
| 2500 | 48.6 | 60.9 | 64.3 | 67.9 | 72.1 | 72.9 | 70.8 | 72.0 | 72.6 | 70.9 | 67.7 | 61.9 | 48.3 | 159.3 |
| 3150 | 44.1 | 54.0 | 59.2 | 62.4 | 68.0 | 69.3 | 66.7 | 65.4 | 68.2 | 64.2 | 60.0 | 53.1 | 37.4 | 158.3 |
| 4000 | 35.9 | 46.0 | 53.1 | 57.7 | 60.3 | 61.0 | 60.0 | 59.7 | 60.4 | 57.3 | 51.3 | 39.2 | 17.5 | 157.8 |
| 5000 | 21.1 | 32.9 | 42.1 | 47.5 | 53.5 | 54.3 | 49.8 | 48.3 | 49.3 | 44.0 | 36.7 | 18.8 | 157.4 | |
| 6300 | 12.5 | 22.3 | 30.3 | 36.0 | 37.5 | 36.2 | 31.9 | 35.4 | 23.2 | 13.0 | | 156.0 | | |
| 8000 | | | 5.0 | 9.6 | 11.9 | 13.1 | 7.1 | 7.6 | | | | 155.5 | | |
| 10000 | | | | | | | | | | | | 156.0 | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|------|-------|
| 0ASPL | 80.3 | 84.0 | 85.5 | 86.6 | 88.9 | 90.4 | 91.6 | 93.9 | 98.5 | 100.1 | 100.9 | 99.9 | 94.5 | 177.8 |
| PWL | 84.2 | 89.2 | 91.6 | 93.6 | 96.4 | 98.0 | 97.9 | 99.7 | 103.5 | 103.9 | 103.7 | 101.4 | 94.8 | |
| PWL | 84.2 | 89.2 | 91.6 | 93.6 | 97.6 | 99.1 | 98.4 | 98.7 | 104.1 | 103.9 | 104.7 | 101.4 | 95.8 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-20-78 TAPE NO. N294 IALPHA SB59 TAMB 30.29
LOCATION C41 ANECH CH AERG. RDG. ADH074 PAMB 29.2980 RELHAM 16.50

MODEL TEST POINT 7300 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. FREE-JET SPEED
7300 H/SEC (0. FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X7304D
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

100
125
160
200

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| | | | | | | | | | | | | | | |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 78.8 | 80.7 | 81.0 | 82.7 | 83.0 | 85.8 | 87.0 | 88.5 | 84.2 | 89.6 | 104.0 | 107.2 | 108.6 | 140.4 |
| 315 | 80.3 | 81.4 | 82.1 | 83.0 | 83.6 | 86.5 | 87.4 | 89.6 | 96.4 | 101.2 | 105.4 | 108.1 | 105.2 | 141.1 |
| 400 | 82.0 | 82.5 | 83.4 | 83.0 | 84.6 | 87.8 | 88.2 | 90.4 | 97.9 | 104.6 | 107.9 | 108.6 | 102.7 | 142.5 |
| 500 | 82.1 | 83.1 | 84.4 | 84.7 | 87.6 | 88.4 | 89.6 | 91.7 | 98.7 | 105.8 | 108.5 | 107.7 | 99.6 | 142.7 |
| 630 | 83.2 | 84.3 | 85.6 | 85.6 | 86.0 | 89.5 | 90.4 | 93.4 | 100.9 | 106.2 | 109.1 | 105.5 | 95.2 | 142.9 |
| 800 | 85.0 | 84.1 | 86.6 | 87.4 | 88.2 | 90.6 | 92.0 | 95.4 | 103.2 | 107.2 | 108.4 | 102.8 | 93.4 | 142.8 |
| 1000 | 85.9 | 84.9 | 87.5 | 87.2 | 88.8 | 91.7 | 93.1 | 96.0 | 104.0 | 107.6 | 107.0 | 99.6 | 92.0 | 142.5 |
| 1250 | 85.3 | 87.6 | 89.1 | 89.1 | 90.0 | 92.8 | 94.0 | 97.4 | 104.5 | 107.5 | 107.3 | 98.2 | 90.9 | 142.7 |
| 1600 | 87.6 | 86.0 | 87.7 | 89.0 | 90.4 | 93.5 | 94.6 | 98.3 | 104.9 | 107.4 | 106.3 | 97.5 | 90.3 | 142.6 |
| 2000 | 85.8 | 86.8 | 88.4 | 88.6 | 90.2 | 93.1 | 94.7 | 98.6 | 105.3 | 107.7 | 105.7 | 96.4 | 90.6 | 142.7 |
| 2500 | 86.2 | 87.0 | 88.8 | 89.1 | 90.9 | 93.5 | 96.1 | 99.3 | 105.2 | 107.2 | 104.9 | 96.8 | 90.6 | 142.5 |
| 3150 | 86.6 | 87.1 | 88.4 | 89.4 | 91.2 | 94.3 | 96.0 | 100.4 | 105.8 | 106.5 | 104.7 | 97.6 | 90.6 | 142.6 |
| 4000 | 87.2 | 86.5 | 88.8 | 89.0 | 90.6 | 93.7 | 95.8 | 99.8 | 105.0 | 106.0 | 103.8 | 97.9 | 89.5 | 142.0 |
| 5000 | 86.7 | 88.7 | 89.0 | 89.7 | 91.0 | 94.4 | 96.3 | 100.2 | 105.2 | 106.2 | 103.8 | 96.5 | 90.4 | 142.4 |
| 6300 | 91.0 | 91.4 | 91.6 | 90.1 | 91.8 | 94.9 | 95.9 | 99.6 | 104.8 | 105.1 | 103.1 | 96.6 | 91.0 | 142.0 |
| 8000 | 90.7 | 91.6 | 92.2 | 91.3 | 91.8 | 94.5 | 96.1 | 98.9 | 104.1 | 104.6 | 102.8 | 96.4 | 90.7 | 142.0 |
| 10000 | 88.1 | 90.3 | 91.5 | 91.3 | 93.1 | 95.8 | 98.7 | 102.6 | 103.7 | 100.5 | 96.3 | 90.2 | 141.6 | |
| 12500 | 86.7 | 88.7 | 89.9 | 90.4 | 92.2 | 94.3 | 94.0 | 96.9 | 99.6 | 101.4 | 98.6 | 89.5 | 140.3 | |
| 16000 | 85.3 | 87.4 | 89.2 | 90.0 | 91.9 | 94.1 | 92.8 | 95.5 | 97.7 | 100.0 | 96.8 | 93.3 | 89.0 | 140.3 |
| 20000 | 80.8 | 85.0 | 86.3 | 87.8 | 90.8 | 92.4 | 90.3 | 92.9 | 95.1 | 96.2 | 93.2 | 90.7 | 86.7 | 139.3 |
| 25000 | 79.9 | 81.3 | 83.6 | 84.1 | 89.0 | 89.6 | 87.7 | 87.9 | 92.8 | 91.7 | 89.0 | 86.6 | 85.2 | 138.4 |
| 31500 | 78.7 | 78.1 | 81.3 | 83.4 | 83.9 | 84.7 | 84.1 | 85.2 | 88.4 | 89.5 | 86.7 | 81.9 | 79.5 | 136.1 |
| 40000 | 73.9 | 73.8 | 77.3 | 78.5 | 81.9 | 82.9 | 78.7 | 80.5 | 83.5 | 83.0 | 80.9 | 76.9 | 74.9 | 137.6 |
| 50000 | 67.5 | 67.4 | 70.4 | 73.1 | 74.7 | 76.2 | 74.7 | 73.4 | 78.9 | 76.0 | 74.2 | 72.2 | 68.8 | 135.9 |
| 63000 | 61.7 | 61.4 | 64.3 | 66.9 | 67.5 | 69.2 | 70.4 | 67.8 | 75.5 | 69.0 | 67.9 | 65.4 | 63.2 | 135.9 |
| 80000 | 54.9 | 54.3 | 57.1 | 60.7 | 59.1 | 62.1 | 61.1 | 61.3 | 67.7 | 62.3 | 61.7 | 56.6 | 55.0 | 135.1 |
| GASPL | 99.7 | 100.3 | 101.6 | 101.8 | 104.1 | 106.0 | 106.9 | 110.4 | 116.1 | 118.5 | 118.4 | 115.7 | 111.1 | 155.4 |

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 3859 TAMB 29.66
LOCATION C41 ANECH CH AERO. RDG. ADH993 PAMB 29.5700 RELHUM 43.80

MODEL TEST POINT 7304 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.65 M/SEC (386.0 FPS) FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X73040

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 86.4 | 86.9 | 85.7 | 85.9 | 84.6 | 85.6 | 85.1 | 86.0 | 83.0 | 97.0 | 100.6 | 103.7 | 102.7 | 137.2 |
| 315 | 86.4 | 86.9 | 85.7 | 85.9 | 84.6 | 85.6 | 85.1 | 86.0 | 83.0 | 97.0 | 100.6 | 103.7 | 102.7 | 140.9 |
| 400 | 87.7 | 87.5 | 86.8 | 86.3 | 86.4 | 86.1 | 87.4 | 86.7 | 86.7 | 103.3 | 106.1 | 106.8 | 102.3 | 141.0 |
| 500 | 88.9 | 88.4 | 88.0 | 86.2 | 89.4 | 88.7 | 88.6 | 89.7 | 88.7 | 103.5 | 106.6 | 105.1 | 99.5 | 140.8 |
| 630 | 89.5 | 89.3 | 89.2 | 88.0 | 90.2 | 89.9 | 89.4 | 91.1 | 101.2 | 104.9 | 106.3 | 103.3 | 100.0 | 141.5 |
| 800 | 92.3 | 92.6 | 92.0 | 90.0 | 90.2 | 91.1 | 91.0 | 93.1 | 102.5 | 105.7 | 105.5 | 101.3 | 100.6 | 141.4 |
| 1000 | 92.4 | 90.3 | 91.6 | 90.8 | 90.9 | 92.3 | 92.2 | 93.8 | 103.1 | 105.6 | 105.8 | 99.6 | 99.0 | 141.4 |
| 1250 | 93.3 | 91.2 | 92.4 | 90.7 | 92.1 | 93.6 | 93.2 | 95.3 | 103.7 | 105.7 | 105.0 | 99.2 | 98.7 | 141.6 |
| 1600 | 92.6 | 93.8 | 94.1 | 92.7 | 92.7 | 94.4 | 94.1 | 96.4 | 104.3 | 106.4 | 104.7 | 98.4 | 99.4 | 142.0 |
| 2000 | 95.0 | 92.2 | 92.6 | 92.7 | 92.6 | 94.3 | 94.5 | 97.1 | 104.6 | 106.2 | 104.3 | 99.2 | 99.7 | 142.1 |
| 2500 | 93.2 | 93.2 | 93.6 | 92.5 | 93.7 | 95.0 | 96.2 | 98.1 | 105.7 | 106.1 | 104.6 | 100.6 | 100.4 | 142.6 |
| 3150 | 93.6 | 93.4 | 94.0 | 93.1 | 94.3 | 96.2 | 96.4 | 99.6 | 105.5 | 106.2 | 104.4 | 100.5 | 99.7 | 142.8 |
| 4000 | 93.9 | 93.5 | 93.7 | 93.6 | 94.1 | 96.1 | 96.9 | 99.5 | 106.0 | 106.5 | 104.4 | 100.5 | 100.6 | 143.1 |
| 5000 | 94.4 | 93.0 | 94.3 | 93.5 | 95.0 | 97.4 | 97.6 | 100.3 | 105.7 | 105.6 | 104.0 | 100.5 | 102.0 | 143.2 |
| 6300 | 96.0 | 94.2 | 94.7 | 94.4 | 95.8 | 97.9 | 97.4 | 98.7 | 105.3 | 105.3 | 103.9 | 100.7 | 102.1 | 143.3 |
| 8000 | 98.0 | 97.7 | 97.1 | 94.7 | 95.8 | 97.5 | 97.6 | 99.1 | 104.3 | 105.0 | 102.4 | 101.4 | 102.6 | 143.4 |
| 10000 | 97.4 | 97.7 | 97.5 | 95.7 | 97.1 | 98.6 | 96.8 | 99.2 | 102.1 | 103.7 | 101.4 | 101.0 | 102.8 | 143.3 |
| 12500 | 95.7 | 96.2 | 96.5 | 95.4 | 96.2 | 97.3 | 96.2 | 97.8 | 101.2 | 103.4 | 100.8 | 100.4 | 103.1 | 143.4 |
| 16000 | 92.8 | 94.0 | 94.4 | 94.0 | 96.4 | 97.1 | 95.2 | 96.8 | 99.5 | 100.3 | 97.7 | 98.1 | 100.8 | 142.9 |
| 20000 | 93.6 | 94.5 | 95.0 | 94.3 | 95.3 | 95.4 | 92.8 | 94.7 | 95.8 | 94.0 | 91.8 | 92.4 | 97.6 | 142.2 |
| 25000 | 88.5 | 91.5 | 91.4 | 91.5 | 93.5 | 92.6 | 89.1 | 88.0 | 94.2 | 92.9 | 91.2 | 95.6 | 95.6 | 142.3 |
| 31500 | 86.8 | 87.1 | 88.0 | 87.0 | 87.9 | 87.7 | 86.6 | 86.8 | 89.8 | 88.9 | 86.3 | 85.6 | 90.1 | 140.8 |
| 40000 | 82.1 | 80.8 | 83.2 | 84.4 | 86.5 | 85.9 | 80.8 | 81.8 | 85.6 | 82.3 | 80.6 | 81.2 | 84.4 | 140.8 |
| 50000 | 79.6 | 78.3 | 80.4 | 80.1 | 79.3 | 79.2 | 76.8 | 74.7 | 83.9 | 77.2 | 76.4 | 76.6 | 80.9 | 140.9 |
| 63000 | 72.3 | 71.0 | 72.6 | 73.8 | 71.5 | 72.2 | 72.9 | 69.8 | 77.5 | 72.0 | 72.0 | 70.1 | 75.4 | 139.8 |
| 80000 | 62.3 | 61.3 | 63.4 | 65.1 | 63.7 | 65.1 | 63.5 | 63.2 | 67.7 | 62.2 | 62.2 | 60.2 | 65.6 | 137.6 |
| QASPL | 106.9 | 106.6 | 106.8 | 105.8 | 107.4 | 108.3 | 107.7 | 109.9 | 116.1 | 117.7 | 117.2 | 115.2 | 114.3 | 156.0 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 366.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | SB59 | TABS | 29.88 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH993 | PAMB | 29.5700 | RELHUM | 43.80 |

| MODEL | TEST POINT | ACUSTIC RANGE | 12.2 M (40.0 FT) ARC | 184.7 SQ CH (23.99 SQ IN) - MODEL | 117.85 M/SEC (386.0 FPS) | FREE-JET SPEED |
|-------|------------|---------------|-----------------------|------------------------------------|---------------------------|----------------|
| 7300 | 7304 | | | | | |

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FH0DL X73041

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 65.9 | 67.2 | 67.7 | 67.6 | 68.3 | 70.1 | 69.4 | 70.2 | 77.5 | 83.1 | 84.3 | 82.8 | 74.9 | 158.7 |
| 63 | 67.1 | 68.1 | 68.6 | 67.6 | 71.3 | 70.8 | 70.5 | 71.2 | 79.5 | 83.2 | 84.8 | 81.0 | 72.1 | 158.5 |
| 80 | 67.6 | 69.0 | 70.0 | 69.5 | 80.3 | 72.0 | 71.3 | 72.6 | 82.0 | 84.6 | 84.4 | 79.2 | 72.5 | 159.1 |
| 100 | 71.4 | 72.3 | 72.7 | 71.5 | 72.0 | 73.1 | 72.9 | 74.6 | 85.2 | 85.3 | 83.5 | 77.1 | 73.2 | 159.1 |
| 125 | 70.4 | 69.6 | 72.1 | 72.2 | 72.7 | 74.2 | 74.0 | 75.2 | 83.7 | 85.1 | 83.7 | 75.3 | 71.2 | 159.1 |
| 160 | 71.0 | 70.5 | 72.9 | 72.0 | 73.8 | 75.4 | 74.9 | 76.5 | 84.2 | 85.1 | 82.8 | 74.6 | 70.5 | 159.2 |
| 200 | 70.2 | 73.0 | 74.4 | 73.8 | 74.2 | 76.1 | 75.6 | 77.5 | 84.7 | 85.6 | 82.2 | 73.5 | 70.7 | 159.7 |
| 250 | 72.2 | 71.1 | 72.9 | 73.6 | 74.1 | 75.7 | 75.8 | 77.9 | 84.7 | 85.1 | 81.5 | 73.9 | 70.4 | 159.7 |
| 315 | 69.9 | 71.7 | 73.3 | 73.0 | 74.7 | 76.2 | 77.2 | 78.7 | 85.5 | 84.6 | 81.4 | 74.7 | 70.2 | 160.3 |
| 400 | 69.8 | 71.5 | 73.4 | 73.3 | 75.0 | 77.1 | 77.2 | 79.5 | 84.9 | 84.3 | 80.7 | 73.9 | 68.5 | 160.4 |
| 500 | 69.6 | 71.3 | 72.8 | 73.5 | 74.5 | 76.7 | 77.3 | 79.5 | 85.1 | 84.3 | 80.2 | 73.3 | 68.5 | 160.8 |
| 630 | 69.7 | 70.3 | 73.0 | 73.1 | 75.2 | 77.7 | 78.0 | 80.0 | 84.5 | 82.9 | 79.3 | 72.7 | 68.8 | 160.8 |
| 800 | 70.6 | 71.2 | 73.1 | 73.6 | 75.8 | 78.1 | 77.3 | 79.1 | 83.7 | 82.3 | 78.7 | 72.1 | 67.7 | 160.9 |
| 1000 | 72.3 | 74.4 | 75.4 | 73.9 | 75.6 | 77.5 | 77.4 | 78.3 | 82.5 | 81.7 | 76.7 | 72.2 | 67.1 | 161.1 |
| 1250 | 71.3 | 74.1 | 75.5 | 74.6 | 76.8 | 78.6 | 78.4 | 78.3 | 80.1 | 80.0 | 75.3 | 70.9 | 65.9 | 161.0 |
| 1600 | 68.7 | 71.9 | 74.1 | 74.1 | 75.5 | 76.9 | 75.5 | 76.5 | 78.6 | 79.1 | 73.7 | 69.0 | 63.8 | 161.1 |
| 2000 | 64.6 | 69.2 | 71.6 | 72.5 | 75.6 | 76.6 | 74.4 | 75.3 | 76.7 | 75.4 | 69.8 | 65.1 | 58.5 | 160.6 |
| 2500 | 63.6 | 68.5 | 71.3 | 72.1 | 74.0 | 74.3 | 71.4 | 72.5 | 72.2 | 68.2 | 62.0 | 56.5 | 50.4 | 159.9 |
| 3150 | 55.4 | 63.0 | 65.9 | 67.6 | 70.8 | 70.2 | 68.4 | 64.3 | 68.6 | 66.6 | 59.8 | 50.4 | 40.0 | 159.9 |
| 4000 | 47.4 | 53.8 | 58.6 | 60.0 | 62.2 | 62.4 | 60.9 | 59.8 | 60.4 | 55.6 | 47.5 | 35.8 | 20.0 | 158.5 |
| 5000 | 32.9 | 40.0 | 47.6 | 52.0 | 55.8 | 55.8 | 50.1 | 49.4 | 50.0 | 41.5 | 31.5 | 17.8 | | 158.5 |
| 6300 | 12.7 | 23.3 | 32.8 | 36.9 | 38.5 | 39.2 | 36.0 | 31.6 | 36.2 | 22.2 | 9.4 | | | 159.5 |
| 8000 | | | 3.6 | 11.3 | 12.6 | 14.4 | 14.0 | 7.3 | 6.5 | | | | | 157.5 |
| 10000 | | | | | | | | | | | | | | 165.3 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

GASPL 82.4 83.9 85.5 85.4 87.7 88.6 88.1 89.7 95.5 96.0 93.9 88.5 82.6 173.5
 PWL 88.9 91.9 94.3 94.8 96.8 97.7 96.2 97.3 101.2 100.9 97.2 90.9 85.4
 PNL 88.9 91.9 95.1 95.3 98.0 98.8 96.2 97.3 102.0 102.0 98.3 90.9 85.4

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 29.85
 LOCATION C41 ANECH CH AERG. RDG. ADH993 PAMB 29.5700 RELHUM 43.80

MODEL TEST POINT 7304 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.65 M/SEC (386.0 FPS) FREE-JET SPEED

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06/30/79 19.452

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X73050
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

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LOCATION C41 ANECH CH AERO. RDG. ADH085 PAYB 29.3260 RELHUM 46.00

MODEL TEST POINT 7305 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CH (23.99 SQ IN) - MODEL 0. FREE-JET SPEED 0. FPS

631

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FM0DL X73050

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PVL

FREQ

50

63

80

100

125

160

200

250

315

400

450

500

550

600

650

700

750

800

850

900

950

1000

1050

1100

1150

1200

1250

1300

1350

1400

1450

1500

1550

1600

1650

1700

1750

1800

1850

1900

1950

2000

2050

2100

2150

2200

2250

2300

2350

2400

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) FREE JET DIAMETER (IN) 0. 48.00 REFRACTION CORRECTION - YES TURBULANCE CORRECTION - YES

TEST DATE 02-21-78 LOCATION C41 ANECH CH TAPE NO. N294 AERO. RDG. ADH085 ALPHA 5859 PAMB 29.3260 TAMB 23.00 RELNUM 46.00

MODEL 7300 TEST POINT 7305 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CH (23.99 SQ IN) - MODEL . 0. SIZE 0. M/SEC (0. FPS) FREE-JET SPEED

GASPL 104.0 106.5 106.7 107.4 108.8 111.0 111.9 115.0 120.5 122.6 124.1 125.1 122.8 161.2

08/30/79 19.452

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMOOL X73051

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 64.4 | 66.4 | 69.6 | 70.3 | 72.0 | 74.5 | 76.8 | 77.5 | 83.8 | 89.5 | 90.4 | 90.4 | 84.7 | 185.5 |
| 63 | 65.2 | 69.3 | 71.1 | 72.1 | 73.1 | 76.1 | 77.1 | 78.3 | 85.1 | 90.3 | 91.7 | 90.7 | 85.5 | 186.5 |
| 80 | 66.2 | 70.6 | 72.2 | 72.9 | 75.9 | 77.2 | 77.7 | 80.2 | 86.4 | 89.9 | 91.2 | 90.4 | 85.0 | 186.3 |
| 100 | 68.9 | 70.6 | 72.9 | 74.4 | 76.4 | 77.9 | 79.2 | 81.4 | 88.1 | 90.9 | 91.2 | 90.6 | 84.8 | 186.8 |
| 125 | 71.2 | 73.0 | 74.9 | 75.2 | 76.4 | 78.9 | 79.9 | 82.9 | 89.4 | 90.4 | 90.2 | 89.6 | 84.5 | 186.5 |
| 160 | 68.6 | 74.5 | 75.1 | 76.7 | 77.4 | 79.9 | 80.7 | 83.9 | 89.5 | 89.6 | 90.3 | 89.9 | 84.2 | 186.8 |
| 200 | 70.4 | 72.5 | 74.1 | 76.2 | 77.2 | 79.9 | 81.4 | 83.9 | 90.0 | 90.1 | 90.4 | 89.9 | 83.9 | 187.1 |
| 250 | 70.0 | 73.5 | 74.7 | 75.5 | 77.1 | 79.1 | 80.6 | 83.5 | 90.6 | 90.4 | 89.6 | 88.1 | 81.6 | 186.8 |
| 315 | 69.3 | 72.4 | 74.4 | 76.2 | 77.5 | 79.5 | 81.7 | 84.4 | 89.3 | 90.6 | 89.2 | 87.2 | 78.7 | 186.7 |
| 400 | 69.6 | 73.3 | 74.1 | 76.2 | 77.2 | 80.0 | 81.7 | 84.7 | 90.0 | 88.7 | 89.0 | 84.3 | 76.2 | 186.3 |
| 500 | 68.7 | 72.8 | 73.6 | 75.2 | 76.8 | 79.3 | 80.5 | 84.5 | 88.5 | 88.4 | 87.5 | 82.8 | 73.3 | 185.7 |
| 630 | 68.6 | 72.8 | 73.7 | 75.1 | 76.9 | 79.7 | 80.9 | 84.3 | 87.6 | 87.9 | 86.2 | 80.5 | 71.4 | 185.4 |
| 800 | 67.9 | 73.4 | 74.9 | 75.8 | 77.1 | 80.4 | 81.2 | 83.3 | 87.1 | 86.6 | 84.7 | 76.1 | 69.7 | 185.1 |
| 1000 | 67.1 | 73.0 | 74.2 | 75.6 | 77.7 | 79.8 | 80.4 | 82.7 | 86.1 | 85.4 | 83.1 | 77.5 | 68.0 | 184.7 |
| 1250 | 64.4 | 71.0 | 73.6 | 75.3 | 76.0 | 80.6 | 79.5 | 82.5 | 84.3 | 84.1 | 81.0 | 75.4 | 64.9 | 184.2 |
| 1600 | 60.6 | 69.0 | 71.0 | 73.8 | 76.7 | 79.3 | 79.1 | 80.3 | 81.8 | 81.2 | 77.4 | 72.1 | 61.1 | 183.1 |
| 2000 | 56.2 | 66.6 | 69.9 | 72.6 | 76.0 | 78.4 | 77.2 | 78.6 | 79.7 | 79.4 | 74.6 | 68.8 | 56.5 | 183.0 |
| 2500 | 51.4 | 62.9 | 65.8 | 69.4 | 74.1 | 75.7 | 73.8 | 75.3 | 75.6 | 74.5 | 69.5 | 62.4 | 49.3 | 161.8 |
| 3150 | 46.3 | 55.8 | 61.3 | 63.7 | 70.3 | 71.5 | 69.8 | 68.7 | 71.5 | 67.2 | 62.3 | 53.6 | 38.4 | 160.7 |
| 4000 | 38.4 | 47.6 | 54.7 | 59.4 | 61.5 | 63.0 | 62.5 | 62.7 | 63.0 | 61.4 | 53.6 | 39.5 | 18.2 | 160.3 |
| 5000 | 23.8 | 34.5 | 43.4 | 48.3 | 54.3 | 55.8 | 51.8 | 51.6 | 51.9 | 48.6 | 39.0 | 20.8 | 159.6 | |
| 6300 | 13.6 | 23.2 | 30.9 | 35.7 | 38.3 | 38.7 | 34.2 | 35.0 | 28.9 | 16.5 | | | 157.5 | |
| 8000 | | | | | | | | | | | | | 159.4 | |

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QASPL 60.3 64.4 65.9 67.4 69.1 91.6 92.4 95.1 100.1 101.1 101.1 101.0 99.7 93.7 178.6
 PWL 84.7 90.2 92.6 94.9 97.7 100.0 99.8 101.6 105.6 105.7 104.4 101.5 94.2

PWLT 84.7 90.2 92.6 94.9 99.9 101.2 99.8 101.8 105.6 105.7 104.4 101.5 95.3

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-21-78 TAPE NO. N294 ALPHA 3859 TAMB 23.00
 LOCATION C41 ANECH CH AERO. RDG. ADH085 PAMB 29.3260 RELHUM 46.00

MODEL TEST POINT 7305 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 0. FREE-JET SPEED 0. FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X73060
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

CASPL

100.4

101.0

102.6

103.1

106.2

107.3

108.3

111.5

115.1

118.7

117.9

115.1

110.5

105.8

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TEST DATE 02-27-78

LOCATION C41 ANECH CH

TAPE NO. N299

AERO. RDG. ADH109

ALPHA 3859

PAMB 29.3300

TAMB 38.00

RELHUM 56.00

MODEL TEST POINT

7306

ACOUSTIC RANGE

12.2 M (

40.0 FT) ARC

154.7 SQ CM (

23.99 SQ IN) - MODEL

117.65 M/SEC (

386.0 FPS)

SIZE

23.99 SQ IN)

- MODEL

117.65 M/SEC (

386.0 FPS)

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X73060

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 85.7 | 86.6 | 85.3 | 85.5 | 84.8 | 84.4 | 84.6 | 86.0 | 90.9 | 96.5 | 99.9 | 103.0 | 102.2 | 136.5 |
| 315 | 85.7 | 86.6 | 85.3 | 85.5 | 86.0 | 86.9 | 86.3 | 86.9 | 93.3 | 102.0 | 104.7 | 106.4 | 103.3 | 140.1 |
| 400 | 87.2 | 87.0 | 86.8 | 86.0 | 86.4 | 87.3 | 87.4 | 88.7 | 94.4 | 102.6 | 105.3 | 106.1 | 101.5 | 140.2 |
| 500 | 88.7 | 87.6 | 87.4 | 86.3 | 87.2 | 87.9 | 88.1 | 89.7 | 96.2 | 103.1 | 105.7 | 104.4 | 99.3 | 140.1 |
| 630 | 89.5 | 88.5 | 88.9 | 87.8 | 88.7 | 89.7 | 89.4 | 91.3 | 98.5 | 104.1 | 104.6 | 102.1 | 99.1 | 141.0 |
| 800 | 92.3 | 92.1 | 91.7 | 89.8 | 89.7 | 90.3 | 90.7 | 92.6 | 100.1 | 104.5 | 104.0 | 99.2 | 98.3 | 140.0 |
| 1000 | 91.9 | 90.0 | 90.4 | 90.0 | 90.9 | 91.5 | 92.2 | 93.8 | 101.4 | 104.3 | 104.0 | 98.3 | 97.2 | 140.0 |
| 1250 | 93.4 | 93.0 | 92.3 | 91.0 | 91.8 | 93.5 | 92.9 | 95.5 | 102.2 | 104.9 | 103.7 | 97.1 | 97.4 | 140.6 |
| 1600 | 92.4 | 93.0 | 93.8 | 92.7 | 92.9 | 94.1 | 94.5 | 96.6 | 102.8 | 105.5 | 102.9 | 97.5 | 98.1 | 141.0 |
| 2000 | 94.2 | 91.9 | 92.7 | 92.9 | 92.4 | 94.2 | 94.6 | 97.2 | 103.4 | 106.6 | 103.4 | 98.1 | 98.9 | 141.7 |
| 2500 | 94.1 | 92.8 | 92.9 | 92.9 | 94.3 | 94.9 | 96.1 | 98.5 | 104.6 | 106.6 | 104.2 | 99.7 | 99.0 | 142.4 |
| 3150 | 94.5 | 93.5 | 93.9 | 93.7 | 94.6 | 95.6 | 97.5 | 99.7 | 104.9 | 107.2 | 105.0 | 100.1 | 100.0 | 143.1 |
| 4000 | 95.2 | 94.1 | 94.3 | 94.9 | 95.2 | 96.8 | 97.7 | 100.9 | 104.9 | 107.6 | 105.5 | 100.8 | 101.3 | 143.7 |
| 5000 | 95.5 | 94.0 | 95.1 | 94.5 | 96.6 | 96.3 | 99.1 | 101.2 | 104.7 | 107.6 | 105.5 | 102.3 | 102.8 | 144.1 |
| 6300 | 98.7 | 96.6 | 96.3 | 96.1 | 97.3 | 99.2 | 99.9 | 101.2 | 105.5 | 107.5 | 105.3 | 102.4 | 102.7 | 144.7 |
| 8000 | 98.9 | 99.7 | 99.4 | 97.1 | 98.3 | 99.4 | 99.5 | 101.5 | 104.6 | 107.0 | 105.3 | 103.5 | 104.4 | 145.2 |
| 10000 | 97.4 | 99.5 | 98.2 | 100.6 | 101.0 | 99.3 | 101.3 | 103.6 | 105.7 | 103.5 | 103.0 | 103.9 | 145.3 | |
| 12500 | 98.8 | 99.1 | 99.4 | 98.7 | 99.5 | 100.1 | 99.1 | 100.2 | 102.9 | 105.8 | 102.3 | 102.2 | 104.2 | 145.8 |
| 16000 | 96.7 | 97.1 | 97.2 | 97.2 | 98.8 | 99.8 | 98.2 | 99.4 | 102.0 | 103.6 | 100.7 | 101.0 | 103.6 | 145.8 |
| 20000 | 95.2 | 95.8 | 96.5 | 96.0 | 98.3 | 98.6 | 96.4 | 97.6 | 98.3 | 96.9 | 94.9 | 95.5 | 99.7 | 144.7 |
| 25000 | 89.9 | 92.9 | 93.5 | 93.5 | 95.8 | 95.7 | 92.5 | 91.5 | 97.7 | 97.9 | 95.2 | 94.4 | 98.1 | 144.9 |
| 31500 | 88.1 | 87.9 | 90.1 | 89.3 | 90.6 | 90.3 | 89.6 | 90.1 | 93.5 | 92.8 | 90.5 | 88.9 | 93.6 | 143.8 |
| 40000 | 85.5 | 84.4 | 87.0 | 87.2 | 88.2 | 87.9 | 84.0 | 85.3 | 89.0 | 86.3 | 84.7 | 84.4 | 88.1 | 143.8 |
| 50000 | 80.5 | 78.8 | 81.4 | 81.5 | 80.1 | 80.0 | 79.0 | 78.2 | 79.8 | 78.1 | 78.7 | 82.4 | 82.0 | |
| 63000 | 72.0 | 71.6 | 72.5 | 74.0 | 71.2 | 71.3 | 73.1 | 71.8 | 78.4 | 74.7 | 74.7 | 72.6 | 77.3 | 140.7 |
| 80000 | 62.6 | 61.1 | 63.1 | 64.9 | 64.9 | 65.3 | 64.8 | 64.9 | 68.6 | 64.9 | 62.8 | 67.5 | 138.6 | |
| QASPL | 108.0 | 107.8 | 108.2 | 107.4 | 109.7 | 109.7 | 109.4 | 111.2 | 115.5 | 118.3 | 117.1 | 115.1 | 114.6 | 157.1 |

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 386.00 REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 8859 TAMB 38.00
 LOCATION C41 ANECH CH AERO. RDG. ADH109 PAMB 29.3300 RELHUM 58.00

MODEL TEST POINT 7306 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CH (23.99 SQ IN) - MODEL 117.65 M/SEC (386.0 FPS) FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X73061

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 65.4 | 66.7 | 67.7 | 67.5 | 68.3 | 69.4 | 69.4 | 70.2 | 75.2 | 82.4 | 83.6 | 82.1 | 74.2 | 157.9 |
| 63 | 66.9 | 67.3 | 68.2 | 68.0 | 73.1 | 70.0 | 70.0 | 71.2 | 77.0 | 82.8 | 83.8 | 80.4 | 71.9 | 157.7 |
| 80 | 67.6 | 68.2 | 69.7 | 69.2 | 84.6 | 71.7 | 71.3 | 72.8 | 79.3 | 83.8 | 82.7 | 78.1 | 71.6 | 158.6 |
| 100 | 70.3 | 71.7 | 72.5 | 71.2 | 71.5 | 72.3 | 72.6 | 74.1 | 80.8 | 84.1 | 82.1 | 75.0 | 70.7 | 157.6 |
| 125 | 69.8 | 69.5 | 71.1 | 71.4 | 72.6 | 73.4 | 74.0 | 75.1 | 82.6 | 83.8 | 81.9 | 74.0 | 69.4 | 157.7 |
| 160 | 71.0 | 70.0 | 72.8 | 72.2 | 73.5 | 75.3 | 74.6 | 76.6 | 82.7 | 84.3 | 81.5 | 72.5 | 69.2 | 158.2 |
| 200 | 69.9 | 72.2 | 74.1 | 73.7 | 74.4 | 75.8 | 76.1 | 77.7 | 83.2 | 84.7 | 80.4 | 72.6 | 69.4 | 158.7 |
| 250 | 71.4 | 70.8 | 72.8 | 73.6 | 73.7 | 75.6 | 75.9 | 78.1 | 83.4 | 85.5 | 80.6 | 72.6 | 69.5 | 159.3 |
| 315 | 70.9 | 71.3 | 72.7 | 73.4 | 75.1 | 76.1 | 77.1 | 79.0 | 84.4 | 85.2 | 81.0 | 73.8 | 68.8 | 160.1 |
| 400 | 70.7 | 71.6 | 73.3 | 73.9 | 75.4 | 77.4 | 78.3 | 79.9 | 84.3 | 85.4 | 81.3 | 73.5 | 68.9 | 160.8 |
| 500 | 71.0 | 71.8 | 73.4 | 74.9 | 75.6 | 77.6 | 78.2 | 80.8 | 84.0 | 85.4 | 81.3 | 73.6 | 69.1 | 161.3 |
| 630 | 70.8 | 71.4 | 73.9 | 74.2 | 76.8 | 78.6 | 79.3 | 80.9 | 83.4 | 84.9 | 80.8 | 74.4 | 69.6 | 161.8 |
| 800 | 73.4 | 73.6 | 74.7 | 75.5 | 77.2 | 79.3 | 79.8 | 80.6 | 83.9 | 84.5 | 80.1 | 73.9 | 68.4 | 162.4 |
| 1000 | 73.3 | 76.4 | 77.6 | 76.4 | 78.1 | 79.4 | 79.3 | 80.7 | 82.6 | 83.7 | 79.7 | 74.3 | 68.9 | 162.9 |
| 1250 | 71.3 | 74.6 | 77.5 | 77.2 | 80.3 | 80.8 | 79.0 | 80.4 | 81.6 | 82.0 | 77.4 | 72.9 | 66.9 | 162.9 |
| 1600 | 71.8 | 74.9 | 77.0 | 77.5 | 78.9 | 79.7 | 78.5 | 79.0 | 80.5 | 81.6 | 75.3 | 70.8 | 64.9 | 163.4 |
| 2000 | 68.7 | 72.3 | 74.4 | 75.7 | 78.0 | 79.2 | 77.4 | 77.9 | 79.2 | 78.7 | 72.7 | 68.0 | 51.3 | 163.4 |
| 2500 | 65.4 | 69.7 | 72.8 | 73.8 | 76.9 | 77.5 | 75.1 | 75.4 | 74.6 | 70.8 | 65.1 | 59.6 | 52.5 | 162.4 |
| 3150 | 56.7 | 64.4 | 68.0 | 69.8 | 72.9 | 73.3 | 69.8 | 67.8 | 72.1 | 69.4 | 62.1 | 53.5 | 42.5 | 162.6 |
| 4000 | 48.7 | 54.7 | 60.7 | 62.3 | 64.9 | 65.0 | 63.9 | 63.1 | 64.1 | 59.6 | 51.1 | 39.2 | 23.5 | 161.4 |
| 5000 | 35.4 | 43.6 | 51.4 | 54.7 | 57.5 | 57.7 | 53.3 | 52.8 | 53.4 | 45.5 | 35.5 | 20.9 | | 161.4 |
| 6300 | 13.6 | 23.8 | 33.8 | 38.2 | 39.3 | 40.0 | 38.2 | 35.0 | 36.5 | 24.8 | 11.2 | | | 159.7 |
| 8000 | | | | | | | | 9.3 | 9.4 | | | | | 158.3 |
| 10000 | | | | | | | | | | | | | | 155.3 |

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OASPL 83.1 84.6 86.5 86.8 90.0 89.8 89.5 90.9 94.6 96.3 93.3 88.0 82.0 174.6

PNL 90.7 93.4 95.7 96.4 99.1 99.7 98.4 99.2 101.9 102.5 97.7 91.7 85.8

PNLT 91.9 93.4 96.4 97.0 100.3 100.8 98.4 98.2 102.5 102.5 97.7 91.7 86.8

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78
LOCATION C41 ANECH CHTAPE NO. N299
AERO. RDG. ADH109IALPHA 3859
PAMB 29.3300TAMB 38.00
RELHUM 56.00MODEL TEST POINT
7306ACOUSTIC RANGE
731.5 M (2400.0 FT) SLSIZE
9032.2 SQ CM (1400.00 SQ IN) - FULLFREE-JET SPEED
117.65 M/SEC (388.0 FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 30 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-150-FMODL X74020
BACKGROUND FJ150-AMODL X01500

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

FREQ
50
63
80
100
125
160
200

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| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 85.6 | 90.6 | 89.3 | 90.1 | 90.6 | 92.6 | 95.6 | 97.1 | 100.3 | 106.9 | 111.6 | 116.7 | 114.9 | 148.4 |
| 315 | 87.4 | 88.7 | 89.4 | 90.0 | 92.6 | 94.4 | 95.1 | 97.2 | 102.4 | 109.2 | 113.6 | 117.3 | 115.5 | 150.0 |
| 400 | 89.4 | 89.9 | 91.5 | 90.5 | 92.3 | 94.5 | 95.6 | 98.2 | 103.7 | 113.3 | 116.7 | 116.3 | 115.2 | 151.6 |
| 500 | 90.0 | 90.5 | 92.5 | 91.6 | 93.4 | 95.0 | 97.2 | 99.6 | 104.6 | 114.6 | 118.2 | 119.4 | 115.1 | 152.9 |
| 630 | 91.6 | 92.1 | 93.6 | 93.2 | 94.6 | 97.1 | 98.0 | 101.4 | 106.6 | 114.9 | 119.1 | 119.6 | 116.7 | 153.5 |
| 800 | 94.3 | 92.4 | 94.4 | 96.0 | 96.6 | 98.6 | 99.6 | 102.7 | 108.9 | 115.2 | 119.1 | 120.3 | 115.7 | 153.9 |
| 1000 | 97.7 | 97.2 | 98.0 | 96.3 | 96.9 | 99.7 | 100.9 | 104.0 | 110.0 | 115.1 | 117.9 | 119.9 | 114.5 | 153.4 |
| 1250 | 95.0 | 97.6 | 99.6 | 99.6 | 100.5 | 101.3 | 101.5 | 104.9 | 110.6 | 114.7 | 118.6 | 120.0 | 112.4 | 153.6 |
| 1600 | 96.8 | 95.2 | 97.0 | 97.2 | 99.1 | 101.5 | 102.3 | 106.2 | 111.5 | 115.0 | 119.5 | 120.0 | 112.0 | 154.0 |
| 2000 | 98.3 | 98.0 | 97.8 | 97.8 | 98.4 | 100.8 | 102.2 | 106.1 | 112.3 | 115.9 | 119.3 | 119.6 | 110.3 | 153.8 |
| 2500 | 102.4 | 100.8 | 100.5 | 99.2 | 99.3 | 101.4 | 103.3 | 107.0 | 112.0 | 116.8 | 118.2 | 116.2 | 107.5 | 153.2 |
| 3150 | 105.2 | 104.5 | 103.0 | 101.5 | 100.6 | 102.5 | 103.9 | 107.5 | 112.3 | 116.1 | 117.3 | 114.5 | 105.5 | 152.7 |
| 4000 | 103.6 | 105.4 | 103.7 | 102.0 | 102.6 | 103.7 | 107.7 | 111.7 | 115.6 | 116.7 | 111.9 | 103.4 | 152.0 | |
| 5000 | 103.0 | 102.9 | 104.4 | 104.1 | 104.7 | 104.6 | 104.2 | 107.6 | 111.4 | 115.6 | 114.4 | 110.1 | 101.8 | 151.7 |
| 6300 | 102.2 | 102.9 | 104.4 | 103.6 | 104.3 | 106.2 | 104.9 | 107.6 | 111.2 | 114.8 | 113.6 | 108.6 | 101.0 | 151.5 |
| 8000 | 102.6 | 103.3 | 103.9 | 103.5 | 104.5 | 106.2 | 106.0 | 107.3 | 110.8 | 113.3 | 112.0 | 107.8 | 99.3 | 151.0 |
| 10000 | 101.2 | 102.7 | 104.3 | 103.4 | 105.5 | 106.6 | 105.6 | 107.6 | 109.9 | 112.6 | 110.9 | 106.4 | 98.7 | 151.1 |
| 12500 | 98.5 | 101.3 | 102.5 | 103.0 | 104.5 | 105.9 | 105.3 | 106.5 | 107.9 | 110.4 | 108.1 | 104.6 | 97.0 | 150.2 |
| 16000 | 96.8 | 99.2 | 101.6 | 102.0 | 104.9 | 105.9 | 103.9 | 105.6 | 106.7 | 109.7 | 106.1 | 102.7 | 95.9 | 150.7 |
| 20000 | 91.7 | 96.8 | 98.3 | 99.5 | 103.0 | 104.6 | 101.5 | 102.9 | 104.5 | 106.1 | 103.5 | 99.6 | 93.3 | 149.9 |
| 25000 | 89.9 | 92.5 | 95.0 | 96.0 | 100.5 | 100.9 | 98.2 | 98.0 | 101.6 | 101.1 | 98.8 | 95.9 | 91.2 | 148.5 |
| 31500 | 88.7 | 88.9 | 92.9 | 94.6 | 94.6 | 95.3 | 94.3 | 95.1 | 98.7 | 99.9 | 96.2 | 90.3 | 86.0 | 148.4 |
| 40000 | 83.3 | 84.4 | 87.4 | 88.5 | 92.9 | 93.8 | 89.2 | 90.3 | 92.9 | 94.8 | 91.7 | 85.4 | 81.5 | 148.1 |
| 50000 | 76.4 | 77.8 | 80.5 | 82.1 | 85.0 | 85.4 | 84.2 | 83.4 | 86.8 | 88.1 | 85.6 | 80.1 | 74.9 | 146.0 |
| 63000 | 71.1 | 71.4 | 74.3 | 76.7 | 76.8 | 76.9 | 76.2 | 77.1 | 84.2 | 82.6 | 79.3 | 75.3 | 68.6 | 145.5 |
| 80000 | 65.2 | 65.5 | 68.8 | 72.3 | 70.2 | 71.8 | 71.9 | 72.2 | 78.7 | 77.5 | 74.6 | 69.6 | 61.0 | 146.8 |
| GASPL | 112.6 | 113.0 | 114.1 | 113.5 | 114.7 | 116.1 | 115.8 | 116.5 | 122.7 | 127.2 | 129.4 | 129.7 | 124.7 | 135.6 |

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 3859 TAMB 31.00
LOCATION C41 ANECH CH AERO. RDG. ADH124 PAMB 29.5600 RELHUM 64.20

MODEL TEST POINT 7402 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 45.11 M/SEC (146.0 FPS) FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-150-FMODL X74020

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 88.4 | 92.7 | 91.0 | 91.2 | 91.0 | 92.8 | 94.7 | 95.7 | 98.3 | 104.2 | 108.5 | 114.0 | 114.2 | 146.7 |
| 315 | 90.1 | 90.9 | 91.2 | 91.2 | 93.0 | 94.5 | 94.5 | 96.1 | 101.0 | 107.4 | 111.6 | 116.4 | 116.2 | 148.4 |
| 400 | 92.1 | 92.2 | 93.2 | 91.7 | 93.0 | 94.5 | 95.2 | 97.5 | 102.8 | 112.1 | 115.4 | 117.4 | 115.9 | 150.9 |
| 500 | 92.7 | 92.8 | 94.3 | 93.0 | 94.1 | 96.1 | 96.1 | 99.1 | 104.1 | 113.7 | 117.3 | 119.0 | 117.2 | 152.6 |
| 630 | 94.3 | 94.4 | 95.4 | 95.4 | 95.4 | 97.2 | 97.2 | 97.7 | 100.7 | 106.0 | 114.1 | 118.3 | 118.1 | 153.4 |
| 800 | 97.0 | 94.7 | 96.2 | 95.7 | 96.7 | 98.7 | 98.7 | 99.5 | 102.0 | 108.4 | 114.5 | 118.5 | 117.8 | 153.9 |
| 1000 | 99.5 | 96.7 | 99.2 | 97.1 | 97.3 | 99.8 | 100.6 | 103.3 | 109.6 | 114.5 | 117.5 | 120.6 | 116.0 | 153.6 |
| 1250 | 97.7 | 99.8 | 101.4 | 100.9 | 101.2 | 101.4 | 101.1 | 104.1 | 110.2 | 114.2 | 116.5 | 120.9 | 115.6 | 154.0 |
| 1600 | 99.5 | 97.5 | 98.8 | 98.5 | 99.8 | 101.6 | 102.0 | 105.5 | 111.0 | 114.5 | 119.2 | 120.9 | 119.9 | 154.2 |
| 2000 | 100.2 | 99.7 | 99.8 | 99.0 | 100.9 | 100.9 | 101.6 | 105.2 | 111.7 | 115.2 | 118.9 | 119.4 | 110.8 | 153.7 |
| 2500 | 104.6 | 102.8 | 101.9 | 100.2 | 99.9 | 101.6 | 103.0 | 106.1 | 111.3 | 116.0 | 117.6 | 116.8 | 108.7 | 152.8 |
| 3150 | 107.6 | 106.5 | 104.6 | 102.6 | 101.2 | 102.7 | 103.6 | 106.7 | 111.6 | 115.3 | 116.6 | 114.9 | 106.4 | 152.4 |
| 4000 | 105.6 | 105.4 | 106.8 | 104.7 | 102.7 | 102.9 | 103.5 | 106.9 | 111.1 | 115.0 | 115.0 | 112.3 | 105.0 | 151.7 |
| 5000 | 105.1 | 104.7 | 106.0 | 105.4 | 105.5 | 105.0 | 104.1 | 107.0 | 110.9 | 115.1 | 113.9 | 110.6 | 104.5 | 151.6 |
| 6300 | 104.6 | 105.1 | 106.2 | 105.0 | 105.3 | 106.7 | 104.9 | 107.3 | 110.9 | 114.3 | 113.4 | 109.5 | 103.2 | 151.5 |
| 8000 | 104.9 | 105.5 | 105.8 | 105.0 | 105.6 | 106.9 | 106.2 | 107.0 | 110.7 | 112.9 | 111.7 | 108.7 | 103.0 | 151.3 |
| 10000 | 103.9 | 105.1 | 106.4 | 105.1 | 106.8 | 107.5 | 106.2 | 107.5 | 110.0 | 112.5 | 110.9 | 107.5 | 101.9 | 151.7 |
| 12500 | 101.2 | 103.8 | 104.7 | 104.8 | 106.0 | 107.0 | 106.0 | 106.7 | 108.3 | 110.6 | 108.5 | 106.1 | 101.8 | 151.1 |
| 16000 | 100.4 | 102.5 | 104.5 | 104.5 | 106.8 | 107.3 | 104.9 | 106.4 | 107.5 | 110.4 | 106.9 | 104.7 | 100.1 | 152.0 |
| 20000 | 95.3 | 100.1 | 101.3 | 102.2 | 105.2 | 106.3 | 102.9 | 103.9 | 105.8 | 107.2 | 104.8 | 102.0 | 99.2 | 151.6 |
| 25000 | 93.5 | 96.0 | 98.2 | 98.9 | 103.1 | 103.1 | 100.1 | 99.5 | 103.5 | 102.8 | 100.7 | 98.9 | 94.8 | 150.7 |
| 31500 | 91.4 | 91.7 | 95.7 | 97.5 | 97.4 | 98.1 | 96.8 | 97.1 | 100.9 | 101.9 | 98.2 | 93.3 | 91.2 | 150.8 |
| 40000 | 86.9 | 88.0 | 90.9 | 91.9 | 96.1 | 96.8 | 91.8 | 92.4 | 95.2 | 96.9 | 93.8 | 88.5 | 85.0 | 150.9 |
| 50000 | 80.1 | 81.4 | 84.1 | 85.5 | 88.2 | 88.4 | 86.7 | 85.5 | 91.1 | 90.1 | 87.6 | 83.2 | 79.5 | 148.6 |
| 63000 | 73.8 | 74.2 | 77.2 | 79.7 | 79.8 | 79.9 | 81.8 | 79.2 | 86.4 | 84.6 | 81.3 | 78.4 | 73.4 | 147.9 |
| 80000 | 68.8 | 69.1 | 72.3 | 75.7 | 73.4 | 74.8 | 74.4 | 74.2 | 80.9 | 79.4 | 76.6 | 68.9 | 63.6 | 149.2 |
| GASPL | 115.0 | 115.2 | 115.9 | 115.1 | 116.0 | 116.9 | 116.0 | 118.1 | 122.4 | 126.6 | 128.6 | 129.9 | 126.2 | 166.0 |

ORIGINAL PAGE IS
OF POOR QUALITYMODEL/FULL SIZE SCALE FACTOR
INPUT 1.000 CALC. 1.000FREE JET VELOCITY (FT/SEC) 148.00
FREE JET DIAMETER (IN) 48.00REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

| | | | | | | | | |
|-----------|--------------|----------|------|--------|------|---------|--------|-------|
| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | 3859 | TAPB | 31.00 | |
| LOCATION | C41 ANECH CH | AERG. | RDG. | ADH124 | PAMB | 29.5600 | RELHUM | 64.20 |

| | | | | | | |
|-------|------------|-------------------|-----|------------------------------------|------|----------------|
| MODEL | TEST POINT | ACQUSTIC RANGE | ARC | 154.7 SQ CM (23.99 SQ IN) - MODEL | SIZE | FREE-JET SPEED |
| 7400 | 7402 | 12.2 M (40.0 FT) | ARC | 45.11 M/SEC (148.0 FPS) | | |

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-150-FMODL X74021

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 70.3 | 71.9 | 74.0 | 73.2 | 74.9 | 76.6 | 77.2 | 79.0 | 83.7 | 91.9 | 93.6 | 93.4 | 88.6 | 168.6 |
| 60 | 70.9 | 72.5 | 75.1 | 74.6 | 76.0 | 78.1 | 78.7 | 80.6 | 84.9 | 93.4 | 95.5 | 95.0 | 89.8 | 170.2 |
| 80 | 72.4 | 74.1 | 76.2 | 75.9 | 77.3 | 79.2 | 79.6 | 82.2 | 86.8 | 93.8 | 96.4 | 95.6 | 90.6 | 171.0 |
| 100 | 75.1 | 74.3 | 76.9 | 77.1 | 78.5 | 80.7 | 81.3 | 83.4 | 89.1 | 94.2 | 96.5 | 96.4 | 90.2 | 171.6 |
| 125 | 77.4 | 78.3 | 79.8 | 78.5 | 79.1 | 81.7 | 82.3 | 84.7 | 90.2 | 94.1 | 95.5 | 96.2 | 88.1 | 171.2 |
| 160 | 75.5 | 79.2 | 81.9 | 82.1 | 82.8 | 83.2 | 82.8 | 85.4 | 90.7 | 93.6 | 96.3 | 96.3 | 87.4 | 171.7 |
| 200 | 77.1 | 76.6 | 79.1 | 79.6 | 81.3 | 83.2 | 83.5 | 86.6 | 91.3 | 93.7 | 96.7 | 96.0 | 85.2 | 171.9 |
| 250 | 77.4 | 78.6 | 79.8 | 79.7 | 80.3 | 82.4 | 83.1 | 86.1 | 91.6 | 94.1 | 96.1 | 94.0 | 81.5 | 171.3 |
| 315 | 81.4 | 81.3 | 81.6 | 80.8 | 80.9 | 82.8 | 84.0 | 86.7 | 91.1 | 94.5 | 94.4 | 90.9 | 78.5 | 170.5 |
| 400 | 83.9 | 84.6 | 84.0 | 82.9 | 82.0 | 83.6 | 84.3 | 87.0 | 91.1 | 93.4 | 92.9 | 88.4 | 75.3 | 170.1 |
| 500 | 81.4 | 83.1 | 85.9 | 84.7 | 83.1 | 83.6 | 84.0 | 86.9 | 90.2 | 92.8 | 90.8 | 85.1 | 72.9 | 169.3 |
| 630 | 80.4 | 82.1 | 84.8 | 85.0 | 85.7 | 85.3 | 84.3 | 86.6 | 89.7 | 92.5 | 89.1 | 82.7 | 71.3 | 169.2 |
| 800 | 79.4 | 82.0 | 84.7 | 84.4 | 85.3 | 86.9 | 84.8 | 86.7 | 89.3 | 91.2 | 89.2 | 80.9 | 68.8 | 169.2 |
| 1000 | 79.3 | 82.2 | 84.0 | 84.2 | 85.4 | 86.8 | 86.0 | 86.2 | 89.0 | 89.6 | 86.1 | 79.5 | 67.5 | 169.0 |
| 1250 | 77.7 | 81.5 | 84.4 | 84.6 | 86.4 | 87.3 | 85.9 | 86.6 | 88.0 | 88.9 | 84.8 | 77.5 | 65.0 | 169.3 |
| 1600 | 74.2 | 79.5 | 82.2 | 83.6 | 85.3 | 86.5 | 85.4 | 85.4 | 85.9 | 86.4 | 81.5 | 74.7 | 62.5 | 168.8 |
| 2000 | 72.4 | 77.7 | 81.7 | 83.0 | 86.1 | 86.7 | 84.1 | 84.9 | 84.7 | 85.5 | 78.9 | 71.6 | 57.8 | 169.7 |
| 2500 | 65.5 | 74.1 | 77.7 | 80.0 | 83.9 | 85.2 | 81.6 | 81.7 | 82.1 | 81.2 | 75.0 | 66.2 | 52.0 | 169.3 |
| 3150 | 60.4 | 67.5 | 72.7 | 75.1 | 80.3 | 80.7 | 77.4 | 75.8 | 77.9 | 74.3 | 67.6 | 58.1 | 39.2 | 168.4 |
| 4000 | 52.1 | 58.5 | 66.3 | 70.5 | 71.7 | 72.8 | 71.1 | 70.1 | 71.5 | 68.7 | 59.8 | 43.6 | 21.1 | 168.5 |
| 5000 | 37.8 | 47.2 | 55.3 | 59.4 | 65.4 | 66.7 | 61.1 | 59.9 | 59.6 | 56.1 | 44.7 | 25.1 | | 168.4 |
| 6300 | 13.1 | 26.4 | 36.4 | 42.3 | 47.4 | 48.4 | 45.9 | 42.3 | 43.4 | 35.1 | 20.7 | | | 165.3 |
| 8000 | | 8.2 | 17.3 | 20.9 | 22.1 | 22.9 | 16.7 | 17.3 | 4.8 | | | | | 166.9 |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GASPL 90.7 92.5 94.6 94.6 95.6 96.9 96.1 97.9 101.7 104.9 105.0 104.9 97.6 183.5
 PNL 97.1 99.7 102.9 103.8 106.0 107.2 105.3 106.4 108.3 110.1 109.2 108.4 96.4
 PNL 98.3 100.8 103.4 104.3 107.3 108.6 105.3 106.4 108.9 110.6 110.3 106.4 96.4

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-76 TAPE NO. N299 IALPHA SB59 TAMB 31.00
 LOCATION C41 ANECH CH AERG. RDG. ADH124 PAMB 29.5600 RELHUM 64.20

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
 7400 7402 731.5 M (2400.0 FT) SL 9032.2 SQ CH (1400.00 SQ IN) - FULL 45.11 M/SEC (148.0 FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X74030
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 84.3 | 87.8 | 87.3 | 88.4 | 89.5 | 91.6 | 93.7 | 96.1 | 99.3 | 106.4 | 111.0 | 114.7 | 113.9 | 147.6 |
| 315 | 85.9 | 87.4 | 88.2 | 88.7 | 90.5 | 92.7 | 93.5 | 96.0 | 100.9 | 108.2 | 112.6 | 116.3 | 113.7 | 148.8 |
| 400 | 87.6 | 88.7 | 89.9 | 89.5 | 91.3 | 93.4 | 94.6 | 96.5 | 102.7 | 112.5 | 116.7 | 117.3 | 112.7 | 150.6 |
| 500 | 88.5 | 89.0 | 91.0 | 90.8 | 91.9 | 94.3 | 95.7 | 97.8 | 103.5 | 113.6 | 117.7 | 117.4 | 110.8 | 151.6 |
| 630 | 88.8 | 89.9 | 91.4 | 91.7 | 93.2 | 95.9 | 96.8 | 100.2 | 106.1 | 114.4 | 118.1 | 116.8 | 108.4 | 151.7 |
| 800 | 92.1 | 90.6 | 92.4 | 92.9 | 94.0 | 96.4 | 97.6 | 101.4 | 107.4 | 114.2 | 117.6 | 115.3 | 105.4 | 151.2 |
| 1000 | 93.2 | 92.2 | 94.7 | 93.8 | 95.4 | 97.7 | 99.6 | 103.0 | 108.7 | 114.1 | 116.2 | 113.9 | 102.8 | 150.4 |
| 1250 | 91.8 | 94.1 | 95.3 | 95.4 | 97.0 | 99.3 | 100.2 | 103.9 | 109.1 | 113.9 | 115.8 | 111.5 | 99.1 | 150.0 |
| 1600 | 94.6 | 92.9 | 95.0 | 95.2 | 97.1 | 100.0 | 101.1 | 104.7 | 110.2 | 113.5 | 116.3 | 109.7 | 99.5 | 150.2 |
| 2000 | 95.5 | 95.3 | 96.5 | 95.6 | 96.7 | 99.0 | 101.4 | 105.1 | 110.8 | 115.1 | 118.6 | 108.6 | 99.3 | 150.3 |
| 2500 | 101.2 | 99.9 | 99.0 | 97.2 | 97.6 | 99.9 | 102.1 | 105.7 | 110.7 | 115.8 | 115.7 | 108.7 | 99.2 | 150.9 |
| 3150 | 105.0 | 104.7 | 103.3 | 101.0 | 99.4 | 101.5 | 102.4 | 106.5 | 111.5 | 115.1 | 115.6 | 108.7 | 100.0 | 151.2 |
| 4000 | 104.1 | 105.9 | 103.9 | 101.7 | 102.1 | 103.0 | 106.2 | 111.7 | 115.0 | 115.2 | 108.1 | 99.1 | 151.3 | |
| 5000 | 102.3 | 102.6 | 104.7 | 104.6 | 104.4 | 104.3 | 103.9 | 106.9 | 110.9 | 115.6 | 114.2 | 106.8 | 98.8 | 151.3 |
| 6300 | 102.0 | 102.4 | 104.1 | 104.1 | 105.3 | 106.2 | 105.1 | 106.8 | 111.0 | 114.5 | 113.0 | 105.3 | 98.7 | 151.1 |
| 8000 | 102.3 | 103.0 | 103.6 | 103.7 | 104.8 | 106.2 | 105.7 | 107.3 | 110.8 | 113.8 | 111.5 | 104.3 | 97.6 | 150.9 |
| 10000 | 100.7 | 102.2 | 104.1 | 103.9 | 105.0 | 106.3 | 106.3 | 107.6 | 109.9 | 112.6 | 110.1 | 104.1 | 97.0 | 150.9 |
| 12500 | 98.7 | 100.8 | 102.5 | 103.2 | 104.7 | 105.4 | 105.1 | 106.7 | 107.9 | 110.9 | 108.1 | 102.1 | 95.5 | 150.3 |
| 16000 | 96.5 | 99.2 | 101.3 | 102.5 | 104.7 | 105.1 | 104.1 | 105.3 | 106.9 | 110.2 | 106.1 | 100.7 | 94.2 | 150.8 |
| 20000 | 91.9 | 96.0 | 98.0 | 99.8 | 103.2 | 104.5 | 101.7 | 103.4 | 104.5 | 107.1 | 103.2 | 96.1 | 92.5 | 150.1 |
| 25000 | 90.6 | 92.2 | 95.3 | 95.7 | 100.2 | 101.1 | 98.9 | 98.3 | 102.4 | 102.3 | 99.1 | 94.1 | 91.1 | 148.9 |
| 31500 | 89.0 | 88.6 | 93.1 | 94.6 | 95.3 | 96.1 | 95.0 | 95.3 | 99.4 | 100.7 | 96.5 | 89.5 | 85.8 | 148.9 |
| 40000 | 83.8 | 83.7 | 87.4 | 89.2 | 93.1 | 93.1 | 89.7 | 90.5 | 94.1 | 95.3 | 91.0 | 84.1 | 81.2 | 148.3 |
| 50000 | 76.7 | 77.0 | 80.0 | 82.8 | 85.0 | 85.7 | 84.7 | 83.9 | 89.3 | 84.6 | 79.1 | 75.2 | 75.2 | 146.3 |
| 63000 | 71.1 | 70.9 | 74.3 | 76.5 | 76.8 | 77.4 | 79.2 | 77.4 | 84.2 | 81.4 | 78.8 | 73.3 | 69.4 | 145.2 |
| 80000 | 65.1 | 64.5 | 69.0 | 71.8 | 70.2 | 71.8 | 71.8 | 71.9 | 79.0 | 77.0 | 73.6 | 65.1 | 61.2 | 146.6 |
| GASPL | 112.1 | 112.5 | 113.7 | 113.4 | 114.4 | 115.6 | 115.4 | 117.7 | 122.0 | 126.6 | 127.8 | 125.5 | 120.0 | 164.3 |

ORIGINAL PAGE IS
OF POOR QUALITYTEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 31.00
LOCATION C41 ANECH CH AERO. RDG. ADH125 PAMB 29.5600 RELHUM 84.10MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
7400 7403 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 81.44 M/SEC (300.0 FPS)

07/17/78 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X74C30

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

10000000

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MODEL/FULL SIZE SCALE FACTOR
INPUT 1.000 CALC. 1.000

FREE JET VELOCITY (FT/SEC)
FREE JET DIAMETER (IN)

REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 JALPHA S859 TAMB 31.00
LOCATION C41 ANECH CH AERO. RDG. ADH125 PAMB 29.5600 RELHUM 64.10

MODEL TEST POINT 7400 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 91.44 M/SEC (300.0 FPS) FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X74031

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 50 | 69.7 | 71.8 | 72.8 | 73.5 | 74.6 | 76.7 | 78.9 | 78.6 | 82.9 | 91.5 | 94.2 | 92.8 | 85.5 | 168.1 |
| 60 | 71.4 | 73.1 | 74.3 | 74.9 | 75.2 | 76.6 | 76.9 | 77.6 | 85.4 | 92.4 | 94.6 | 92.7 | 84.6 | 168.4 |
| 80 | 72.2 | 73.4 | 75.4 | 75.7 | 76.5 | 78.1 | 77.9 | 80.0 | 86.9 | 92.4 | 94.5 | 92.1 | 83.5 | 168.3 |
| 100 | 72.5 | 74.2 | 75.8 | 76.9 | 77.3 | 78.7 | 76.9 | 81.2 | 88.4 | 92.5 | 93.5 | 91.5 | 82.6 | 167.9 |
| 125 | 75.2 | 74.6 | 76.6 | 77.7 | 78.6 | 80.0 | 80.7 | 82.7 | 88.6 | 91.9 | 92.6 | 85.4 | 78.2 | 166.9 |
| 160 | 76.1 | 76.0 | 78.8 | 79.3 | 80.2 | 81.6 | 81.2 | 83.4 | 89.6 | 91.7 | 92.8 | 86.3 | 77.9 | 167.0 |
| 200 | 74.9 | 76.0 | 79.4 | 79.1 | 80.3 | 82.2 | 82.0 | 84.2 | 90.1 | 92.9 | 92.0 | 84.8 | 77.0 | 167.3 |
| 250 | 77.4 | 76.6 | 78.9 | 79.0 | 79.6 | 81.2 | 82.3 | 84.4 | 90.0 | 93.6 | 92.0 | 84.8 | 76.5 | 167.6 |
| 315 | 76.7 | 77.6 | 79.6 | 80.1 | 80.2 | 82.0 | 82.9 | 85.0 | 90.8 | 92.8 | 91.6 | 84.6 | 75.6 | 166.1 |
| 400 | 82.2 | 82.1 | 81.5 | 83.9 | 81.9 | 83.5 | 83.1 | 85.6 | 91.0 | 92.8 | 91.3 | 83.6 | 74.4 | 168.7 |
| 500 | 85.8 | 86.6 | 85.7 | 86.4 | 84.2 | 84.2 | 83.8 | 85.4 | 90.4 | 93.4 | 90.3 | 82.3 | 74.7 | 169.7 |
| 630 | 83.7 | 85.2 | 87.7 | 87.6 | 87.2 | 86.5 | 84.8 | 86.3 | 90.7 | 92.6 | 89.4 | 80.8 | 74.1 | 170.0 |
| 800 | 81.7 | 83.9 | 86.8 | 87.3 | 88.3 | 88.6 | 86.3 | 86.5 | 90.9 | 91.9 | 87.6 | 79.3 | 72.0 | 170.2 |
| 1000 | 81.6 | 83.8 | 86.5 | 87.1 | 88.1 | 89.0 | 87.4 | 87.3 | 89.9 | 90.7 | 86.1 | 78.7 | 70.4 | 170.3 |
| 1250 | 81.2 | 84.1 | 85.9 | 87.2 | 88.2 | 89.2 | 87.9 | 87.5 | 88.0 | 88.9 | 83.9 | 76.1 | 67.8 | 170.3 |
| 1600 | 78.5 | 82.4 | 85.6 | 86.2 | 87.7 | 87.9 | 86.5 | 86.4 | 87.2 | 88.3 | 81.6 | 74.0 | 64.7 | 170.5 |
| 2000 | 78.0 | 78.9 | 83.1 | 86.1 | 87.9 | 89.6 | 85.4 | 84.8 | 84.9 | 85.0 | 78.2 | 70.2 | 60.6 | 170.6 |
| 2500 | 72.6 | 76.3 | 81.9 | 82.7 | 85.9 | 86.5 | 82.6 | 82.3 | 83.2 | 80.3 | 74.0 | 65.7 | 57.2 | 170.7 |
| 3150 | 64.0 | 72.1 | 76.2 | 77.1 | 81.6 | 81.7 | 78.6 | 76.3 | 76.3 | 76.3 | 67.6 | 55.2 | 41.8 | 169.8 |
| 4000 | 55.7 | 62.8 | 68.8 | 71.8 | 73.2 | 73.8 | 71.4 | 69.4 | 70.2 | 67.1 | 55.8 | 41.8 | 23.7 | 168.7 |
| 5000 | 41.5 | 49.1 | 56.3 | 61.8 | 66.6 | 65.9 | 61.1 | 59.2 | 59.6 | 53.2 | 41.3 | 23.4 | 168.5 | |
| 6300 | 20.1 | 31.2 | 41.4 | 44.7 | 48.2 | 48.7 | 46.0 | 41.8 | 43.2 | 32.7 | 18.4 | 166.9 | 166.2 | |
| 8000 | | 11.7 | 16.3 | 21.5 | 22.6 | 22.4 | 16.0 | 18.2 | 4.9 | | | | 165.2 | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GASPL 92.0 93.6 95.7 96.5 97.3 97.9 96.4 97.2 101.5 104.2 103.8 99.8 91.6 182.6
PNL 98.9 101.6 104.5 106.0 107.5 108.1 105.9 106.0 106.5 110.0 107.2 100.6 91.9
PNLT 100.4 102.7 105.2 106.5 108.6 109.2 105.9 106.0 106.5 110.0 107.2 100.6 93.2

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 3859 TAMB 31.00
LOCATION C41 ANECH CH AERG. RDG. ADH125 PAMB 29.5600 RELHUM 64.10

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
7400 7403 731.5 M (2400.0 FT) SL 9032.2 SQ CH (1400.00 SQ IN) - FULL 91.44 M/SEC (300.0 FPS)

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
99.0 DEG. F., 70 PERCENT R.H. STD. DAY, 88 40.0 FT. ARC

| IDENTIFICATION - MODEL | | X74060 |
|-------------------------|--|--------|
| FJ-150-FMODEL | | |
| BACKGROUND FJB150-AMODL | | X01500 |

ANGLES MEASURED FROM INLET, DEGREES

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ORIGINAL PAGE IS
OF POOR QUALITY

| FREQ | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 | 1100 | 1150 | 1200 | 1250 | 1300 | 1350 | 1400 | 1450 | 1500 | 1550 | 1600 | 1650 | 1700 | 1750 | 1800 | 1850 | 1900 | 1950 | 2000 | 2050 | 2100 | 2150 | 2200 | 2250 | 2300 | 2350 | 2400 | 2450 | 2500 | 2550 | 2600 | 2650 | 2700 | 2750 | 2800 | 2850 | 2900 | 2950 | 3000 | 3050 | 3100 | 3150 | 3200 | 3250 | 3300 | 3350 | 3400 | 3450 | 3500 | 3550 | 3600 | 3650 | 3700 | 3750 | 3800 | 3850 | 3900 | 3950 | 4000 | 4050 | 4100 | 4150 | 4200 | 4250 | 4300 | 4350 | 4400 | 4450 | 4500 | 4550 | 4600 | 4650 | 4700 | 4750 | 4800 | 4850 | 4900 | 4950 | 5000 | 5050 | 5100 | 5150 | 5200 | 5250 | 5300 | 5350 | 5400 | 5450 | 5500 | 5550 | 5600 | 5650 | 5700 | 5750 | 5800 | 5850 | 5900 | 5950 | 6000 | 6050 | 6100 | 6150 | 6200 | 6250 | 6300 | 6350 | 6400 | 6450 | 6500 | 6550 | 6600 | 6650 | 6700 | 6750 | 6800 | 6850 | 6900 | 6950 | 7000 | 7050 | 7100 | 7150 | 7200 | 7250 | 7300 | 7350 | 7400 | 7450 | 7500 | 7550 | 7600 | 7650 | 7700 | 7750 | 7800 | 7850 | 7900 | 7950 | 8000 | 8050 | 8100 | 8150 | 8200 | 8250 | 8300 | 8350 | 8400 | 8450 | 8500 | 8550 | 8600 | 8650 | 8700 | 8750 | 8800 | 8850 | 8900 | 8950 | 9000 | 9050 | 9100 | 9150 | 9200 | 9250 | 9300 | 9350 | 9400 | 9450 | 9500 | 9550 | 9600 | 9650 | 9700 | 9750 | 9800 | 9850 | 9900 | 9950 | 10000 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 250 | 68.5 | 69.6 | 70.6 | 71.6 | 72.6 | 73.6 | 74.6 | 75.6 | 76.6 | 77.6 | 78.6 | 79.6 | 80.6 | 81.6 | 82.6 | 83.6 | 84.6 | 85.6 | 86.6 | 87.6 | 88.6 | 89.6 | 90.6 | 91.6 | 92.6 | 93.6 | 94.6 | 95.6 | 96.6 | 97.6 | 98.6 | 99.6 | 100.6 | 101.6 | 102.6 | 103.6 | 104.6 | 105.6 | 106.6 | 107.6 | 108.6 | 109.6 | 110.6 | 111.6 | 112.6 | 113.6 | 114.6 | 115.6 | 116.6 | 117.6 | 118.6 | 119.6 | 120.6 | 121.6 | 122.6 | 123.6 | 124.6 | 125.6 | 126.6 | 127.6 | 128.6 | 129.6 | 130.6 | 131.6 | 132.6 | 133.6 | 134.6 | 135.6 | 136.6 | 137.6 | 138.6 | 139.6 | 140.6 | 141.6 | 142.6 | 143.6 | 144.6 | 145.6 | 146.6 | 147.6 | 148.6 | 149.6 | 150.6 | 151.6 | 152.6 | 153.6 | 154.6 | 155.6 | 156.6 | 157.6 | 158.6 | 159.6 | 160.6 | 161.6 | 162.6 | 163.6 | 164.6 | 165.6 | 166.6 | 167.6 | 168.6 | 169.6 | 170.6 | 171.6 | 172.6 | 173.6 | 174.6 | 175.6 | 176.6 | 177.6 | 178.6 | 179.6 | 180.6 | 181.6 | 182.6 | 183.6 | 184.6 | 185.6 | 186.6 | 187.6 | 188.6 | 189.6 | 190.6 | 191.6 | 192.6 | 193.6 | 194.6 | 195.6 | 196.6 | 197.6 | 198.6 | 199.6 | 200.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 300 | 68.5 | 69.6 | 70.6 | 71.6 | 72.6 | 73.6 | 74.6 | 75.6 | 76.6 | 77.6 | 78.6 | 79.6 | 80.6 | 81.6 | 82.6 | 83.6 | 84.6 | 85.6 | 86.6 | 87.6 | 88.6 | 89.6 | 90.6 | 91.6 | 92.6 | 93.6 | 94.6 | 95.6 | 96.6 | 97.6 | 98.6 | 99.6 | 100.6 | 101.6 | 102.6 | 103.6 | 104.6 | 105.6 | 106.6 | 107.6 | 108.6 | 109.6 | 110.6 | 111.6 | 112.6 | 113.6 | 114.6 | 115.6 | 116.6 | 117.6 | 118.6 | 119.6 | 120.6 | 121.6 | 122.6 | 123.6 | 124.6 | 125.6 | 126.6 | 127.6 | 128.6 | 129.6 | 130.6 | 131.6 | 132.6 | 133.6 | 134.6 | 135.6 | 136.6 | 137.6 | 138.6 | 139.6 | 140.6 | 141.6 | 142.6 | 143.6 | 144.6 | 145.6 | 146.6 | 147.6 | 148.6 | 149.6 | 150.6 | 151.6 | 152.6 | 153.6 | 154.6 | 155.6 | 156.6 | 157.6 | 158.6 | 159.6 | 160.6 | 161.6 | 162.6 | 163.6 | 164.6 | 165.6 | 166.6 | 167.6 | 168.6 | 169.6 | 170.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| TEST DATE | TAPE NO. | ALPHA | TAMB |
|-----------------------|------------|-------|--------|
| 02-27-78 | N299 | S859 | 32.00 |
| LOCATION C41 ANECH CH | AERG. RDG. | PAMB | RELHUM |
| | | | 63.80 |

| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
|-------|------------|-----------------------|----------------------------|--------------------------|
| 7400 | 7406 | 12.2 M (40.0 FT) ARC | 154.7 SQ CM (23.99 SQ IN) | 45.11 M/SEC (148.0 FPS) |

643

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 40.0 FT. ARC

IDENTIFICATION - FJ-150-FMODL X74060

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 89.2 | 92.9 | 92.5 | 91.7 | 91.8 | 93.6 | 95.5 | 97.0 | 99.3 | 105.7 | 110.0 | 115.5 | 115.4 | 148.1 |
| 315 | 91.1 | 91.9 | 91.9 | 91.7 | 93.4 | 95.0 | 95.3 | 96.9 | 101.3 | 108.7 | 113.1 | 116.6 | 116.4 | 148.7 |
| 400 | 92.6 | 93.0 | 94.0 | 92.5 | 93.7 | 95.5 | 96.0 | 97.7 | 103.3 | 113.4 | 116.3 | 118.6 | 117.2 | 152.1 |
| 500 | 93.2 | 94.0 | 95.0 | 93.5 | 94.8 | 96.6 | 97.3 | 99.3 | 104.5 | 115.2 | 118.6 | 120.0 | 118.3 | 153.8 |
| 630 | 94.8 | 94.9 | 95.7 | 94.6 | 96.2 | 97.4 | 98.6 | 101.4 | 107.0 | 116.4 | 119.8 | 120.7 | 119.1 | 154.8 |
| 800 | 96.3 | 95.6 | 93.9 | 97.0 | 97.1 | 99.0 | 99.7 | 102.9 | 108.6 | 116.8 | 121.6 | 122.0 | 118.6 | 155.9 |
| 1000 | 101.4 | 100.8 | 101.0 | 98.6 | 99.1 | 100.3 | 101.2 | 103.9 | 110.2 | 116.7 | 122.3 | 121.7 | 116.8 | 156.0 |
| 1250 | 100.4 | 102.6 | 104.0 | 102.3 | 102.9 | 102.7 | 102.5 | 105.0 | 110.2 | 116.7 | 123.0 | 121.9 | 115.1 | 156.4 |
| 1600 | 105.8 | 101.5 | 101.3 | 99.7 | 100.9 | 102.6 | 102.9 | 105.6 | 111.3 | 116.5 | 123.1 | 120.1 | 111.3 | 155.9 |
| 2000 | 105.8 | 106.2 | 105.2 | 102.3 | 100.5 | 101.7 | 102.5 | 106.1 | 111.6 | 117.7 | 121.3 | 117.4 | 109.3 | 154.9 |
| 2500 | 105.0 | 105.0 | 106.0 | 104.6 | 104.4 | 103.4 | 103.7 | 106.6 | 111.5 | 118.1 | 119.9 | 115.7 | 107.2 | 154.3 |
| 3150 | 104.1 | 104.9 | 105.1 | 104.5 | 104.6 | 105.2 | 104.6 | 107.7 | 112.3 | 117.5 | 118.0 | 113.6 | 104.7 | 153.5 |
| 4000 | 104.0 | 103.1 | 104.3 | 103.4 | 104.0 | 104.9 | 105.2 | 107.6 | 111.6 | 117.0 | 116.7 | 111.3 | 104.3 | 152.7 |
| 5000 | 103.8 | 104.0 | 104.5 | 103.1 | 103.3 | 105.0 | 106.1 | 108.2 | 111.9 | 116.9 | 116.8 | 109.6 | 103.2 | 152.6 |
| 6300 | 103.2 | 103.6 | 104.5 | 103.6 | 104.4 | 105.2 | 105.6 | 107.6 | 111.6 | 115.5 | 114.9 | 108.5 | 103.2 | 152.0 |
| 8000 | 102.8 | 103.7 | 104.4 | 103.8 | 104.9 | 105.6 | 105.4 | 108.0 | 111.5 | 114.4 | 113.7 | 107.0 | 102.0 | 151.8 |
| 10000 | 102.4 | 103.4 | 104.5 | 104.1 | 105.5 | 106.5 | 105.2 | 107.7 | 111.0 | 114.0 | 112.4 | 107.0 | 100.9 | 151.9 |
| 12500 | 102.2 | 102.1 | 103.0 | 103.4 | 104.6 | 105.6 | 104.8 | 106.4 | 109.0 | 112.1 | 110.6 | 104.8 | 101.3 | 151.2 |
| 16000 | 98.3 | 100.6 | 102.7 | 103.4 | 105.0 | 105.6 | 104.2 | 105.9 | 108.2 | 111.4 | 108.9 | 103.7 | 99.9 | 151.8 |
| 20000 | 94.1 | 99.5 | 100.4 | 101.3 | 105.0 | 104.9 | 101.7 | 103.4 | 106.0 | 108.0 | 106.5 | 101.3 | 99.4 | 151.5 |
| 25000 | 92.8 | 95.1 | 98.1 | 97.7 | 102.7 | 102.7 | 99.9 | 98.3 | 103.5 | 104.3 | 102.8 | 98.7 | 94.3 | 150.8 |
| 31500 | 91.0 | 91.9 | 95.4 | 96.7 | 97.7 | 97.7 | 96.6 | 97.0 | 101.0 | 103.0 | 99.1 | 93.7 | 91.0 | 151.0 |
| 40000 | 86.3 | 87.2 | 90.6 | 91.7 | 95.7 | 96.2 | 91.4 | 92.0 | 95.8 | 97.7 | 94.6 | 88.1 | 84.5 | 150.8 |
| 50000 | 79.4 | 80.6 | 83.5 | 85.6 | 87.3 | 88.1 | 86.6 | 85.1 | 91.5 | 91.0 | 88.5 | 82.1 | 79.6 | 146.7 |
| 63000 | 73.7 | 74.7 | 77.5 | 80.3 | 79.6 | 79.8 | 81.2 | 79.1 | 85.7 | 85.5 | 82.9 | 77.0 | 73.5 | 143.2 |
| 80000 | 67.7 | 68.8 | 71.7 | 76.1 | 73.5 | 75.0 | 73.8 | 74.1 | 81.0 | 80.6 | 78.2 | 68.5 | 63.7 | 149.6 |
| QASPL | 114.8 | 115.0 | 115.7 | 114.9 | 115.9 | 116.6 | 116.2 | 118.6 | 122.9 | 128.5 | 131.6 | 130.4 | 126.8 | 167.1 |

ORIGINAL PAGE IS
OF POOR QUALITY

| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 148.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 02-27-78 | TAPE NO. | N239 | ALPHA | 3859 | TAMB | 32.00 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH127 | PAMB | 29.5700 | RELHUM | 63.50 |

| MODEL | TEST POINT | ACUSTIC RANGE | 12.2 M (40.0 FT) | ARC | 154.7 SQ CM (23.99 SQ IN) | MODEL | FREE-JET SPEED |
|-------|------------|---------------|-------------------|-----|----------------------------|-------|--------------------------|
| 7400 | 7406 | | | | | | 45.11 M/SEC (148.0 FPS) |

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, S₀ 2400.0 FT. SL

IDENTIFICATION - FJ-150-FMODL X74061

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|-------|------|-------|-------|
| 50 | 70.8 | 72.7 | 74.8 | 74.0 | 75.7 | 77.6 | 77.9 | 79.3 | 84.2 | 93.1 | 94.6 | 94.8 | 89.9 | 169.8 |
| 63 | 71.4 | 73.6 | 75.9 | 75.1 | 76.7 | 78.6 | 79.2 | 80.8 | 85.3 | 94.9 | 97.0 | 96.0 | 90.9 | 171.5 |
| 80 | 72.9 | 74.6 | 76.4 | 76.1 | 78.1 | 79.5 | 80.5 | 82.9 | 87.8 | 96.1 | 98.0 | 96.6 | 91.6 | 172.4 |
| 100 | 76.4 | 78.2 | 77.7 | 78.5 | 79.0 | 81.0 | 81.5 | 84.4 | 89.6 | 96.4 | 99.6 | 97.8 | 90.9 | 173.5 |
| 125 | 79.3 | 80.4 | 81.6 | 80.0 | 80.9 | 82.2 | 83.0 | 85.3 | 90.8 | 96.2 | 100.2 | 97.4 | 89.0 | 173.7 |
| 160 | 78.2 | 82.0 | 84.5 | 83.5 | 84.5 | 84.2 | 86.2 | 86.2 | 90.7 | 96.0 | 100.8 | 97.3 | 86.9 | 174.1 |
| 200 | 83.3 | 80.7 | 81.7 | 80.8 | 82.4 | 84.2 | 84.4 | 86.6 | 91.6 | 95.6 | 100.6 | 95.1 | 82.6 | 173.6 |
| 250 | 83.0 | 85.1 | 85.3 | 83.2 | 81.8 | 83.1 | 83.8 | 87.0 | 91.9 | 96.6 | 98.4 | 92.0 | 79.9 | 172.5 |
| 315 | 81.8 | 83.5 | 85.7 | 85.2 | 85.4 | 84.6 | 84.7 | 87.1 | 91.2 | 96.7 | 96.6 | 89.8 | 77.0 | 172.0 |
| 400 | 80.4 | 83.1 | 84.5 | 84.7 | 85.6 | 86.1 | 85.5 | 87.9 | 91.8 | 95.6 | 94.3 | 87.2 | 73.5 | 171.1 |
| 500 | 79.8 | 80.9 | 83.4 | 83.4 | 84.5 | 85.6 | 85.7 | 87.6 | 90.9 | 94.8 | 92.5 | 84.1 | 72.1 | 170.4 |
| 630 | 79.1 | 81.3 | 83.2 | 82.8 | 83.5 | 85.3 | 86.2 | 87.9 | 90.7 | 94.3 | 91.1 | 82.0 | 70.0 | 170.2 |
| 800 | 78.0 | 80.6 | 83.0 | 83.2 | 84.3 | 85.1 | 85.6 | 87.2 | 90.1 | 92.5 | 89.7 | 79.9 | 68.8 | 169.7 |
| 1000 | 77.1 | 80.4 | 82.7 | 83.1 | 84.7 | 85.6 | 85.2 | 87.2 | 89.7 | 91.1 | 88.1 | 77.7 | 66.5 | 169.4 |
| 1250 | 76.3 | 79.7 | 82.1 | 83.2 | 85.2 | 86.3 | 84.8 | 86.8 | 89.0 | 90.4 | 86.3 | 77.0 | 64.0 | 169.6 |
| 1600 | 73.2 | 77.8 | 82.1 | 83.9 | 85.1 | 84.2 | 85.1 | 86.6 | 87.9 | 83.5 | 73.4 | 62.0 | 168.8 | |
| 2000 | 70.3 | 76.0 | 82.2 | 81.9 | 84.2 | 85.1 | 83.4 | 84.4 | 85.4 | 86.8 | 80.9 | 70.6 | 57.6 | 169.5 |
| 2500 | 64.4 | 73.1 | 80.8 | 79.1 | 83.7 | 83.8 | 80.4 | 81.2 | 82.4 | 81.9 | 76.8 | 65.4 | 52.2 | 169.1 |
| 3150 | 59.7 | 66.6 | 74.0 | 80.0 | 80.3 | 77.2 | 74.6 | 77.9 | 75.8 | 69.6 | 57.9 | 38.7 | 168.5 | |
| 4000 | 51.6 | 58.6 | 69.7 | 72.0 | 72.4 | 70.9 | 70.0 | 71.6 | 69.8 | 59.7 | 43.9 | 20.9 | 168.7 | |
| 5000 | 37.2 | 46.4 | 59.3 | 65.0 | 66.1 | 60.7 | 59.5 | 60.2 | 56.9 | 45.5 | 24.6 | | 168.4 | |
| 6300 | 12.5 | 25.6 | 30.3 | 42.4 | 46.5 | 48.1 | 45.6 | 41.9 | 43.8 | 36.0 | 21.5 | | 166.3 | |
| 8000 | | | 8.4 | 17.8 | 20.7 | 22.0 | 22.2 | 16.6 | 17.7 | 5.7 | | | 165.9 | |
| 10000 | | | | | | | | | | | | | 167.3 | |

ORIGINAL PAGE IS
OF POOR QUALITY

| | | | | | | | | | | | | | | |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| OASPL | 91.1 | 92.9 | 94.8 | 94.6 | 95.9 | 96.8 | 96.5 | 98.5 | 102.2 | 106.9 | 108.9 | 105.5 | 98.2 | 184.6 |
| PWL | 96.2 | 99.2 | 102.3 | 103.3 | 106.0 | 106.6 | 105.2 | 106.4 | 108.9 | 111.9 | 112.0 | 106.1 | 96.5 | |
| PWL | 97.3 | 99.2 | 102.3 | 103.8 | 107.2 | 107.8 | 105.2 | 106.4 | 109.5 | 112.4 | 113.0 | 106.1 | 96.5 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 5859 TAMB 32.00
LOCATION C41 ANECH CH AERO. RDG. ADH127 PAMB 29.5700 RELHUM 63.50

MODEL TEST POINT 7406 ACUSTIC RANGE 731.5 M (2400.0 FT) SL SIZE 9032.2 3Q CH (1400.00 SQ IN) - FULL FREE-JET SPEED 45.11 M/SEC (146.0 FPS)

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 98 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X74070
 BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 85.0 | 86.3 | 88.3 | 89.4 | 89.7 | 92.1 | 94.6 | 96.6 | 99.3 | 105.9 | 111.0 | 116.5 | 118.1 | 148.2 |
| 315 | 86.6 | 87.6 | 88.4 | 89.2 | 90.5 | 92.4 | 94.3 | 96.5 | 100.7 | 108.7 | 113.1 | 117.1 | 118.2 | 149.6 |
| 400 | 88.6 | 89.2 | 90.4 | 89.2 | 91.1 | 93.4 | 94.6 | 96.5 | 102.2 | 112.5 | 116.2 | 118.6 | 114.5 | 151.4 |
| 500 | 88.7 | 89.5 | 91.2 | 91.1 | 92.4 | 94.8 | 95.7 | 97.8 | 104.3 | 114.3 | 118.2 | 119.2 | 113.1 | 152.6 |
| 630 | 89.8 | 90.6 | 92.4 | 92.4 | 94.0 | 95.5 | 97.3 | 100.4 | 106.1 | 115.2 | 119.6 | 118.8 | 111.4 | 153.2 |
| 800 | 92.6 | 91.4 | 93.7 | 94.2 | 94.8 | 96.6 | 98.6 | 102.2 | 107.9 | 116.0 | 120.6 | 118.0 | 109.7 | 153.7 |
| 1000 | 95.2 | 94.5 | 96.0 | 95.3 | 96.8 | 98.2 | 99.9 | 103.0 | 109.5 | 116.1 | 120.2 | 117.6 | 107.3 | 153.5 |
| 1250 | 96.3 | 96.8 | 97.8 | 97.1 | 98.7 | 100.6 | 100.7 | 104.6 | 110.1 | 115.9 | 121.8 | 117.0 | 105.4 | 154.3 |
| 1600 | 103.1 | 100.4 | 99.2 | 98.0 | 98.6 | 100.7 | 102.1 | 105.2 | 110.5 | 116.5 | 122.5 | 115.7 | 105.5 | 154.8 |
| 2000 | 102.0 | 103.3 | 103.5 | 101.3 | 99.4 | 100.0 | 102.2 | 105.8 | 111.3 | 117.9 | 121.1 | 114.6 | 104.8 | 154.3 |
| 2500 | 102.2 | 102.9 | 103.2 | 103.2 | 102.8 | 102.4 | 103.1 | 106.2 | 111.2 | 118.1 | 120.0 | 112.7 | 103.7 | 153.9 |
| 3150 | 101.0 | 101.5 | 102.3 | 102.8 | 103.1 | 104.5 | 104.6 | 107.3 | 112.5 | 117.4 | 117.8 | 111.5 | 102.0 | 153.0 |
| 4000 | 100.8 | 100.6 | 101.7 | 100.9 | 102.2 | 103.3 | 104.5 | 107.7 | 111.9 | 116.8 | 116.7 | 109.1 | 100.6 | 152.3 |
| 5000 | 101.5 | 101.1 | 102.2 | 101.4 | 102.2 | 103.6 | 104.9 | 107.9 | 111.9 | 116.8 | 115.7 | 107.8 | 99.1 | 152.2 |
| 6300 | 100.2 | 101.1 | 102.9 | 102.1 | 102.6 | 104.2 | 104.4 | 107.8 | 111.5 | 115.3 | 114.3 | 106.8 | 99.2 | 151.4 |
| 8000 | 99.8 | 101.3 | 102.4 | 102.0 | 103.3 | 103.9 | 104.0 | 107.6 | 111.6 | 114.3 | 112.7 | 105.1 | 97.6 | 151.1 |
| 12000 | 98.7 | 100.7 | 102.1 | 102.1 | 103.5 | 104.8 | 103.8 | 107.1 | 110.1 | 113.9 | 110.6 | 104.4 | 96.7 | 150.6 |
| 12500 | 96.7 | 99.3 | 101.0 | 101.7 | 102.7 | 104.1 | 102.8 | 105.5 | 108.6 | 111.6 | 108.6 | 102.3 | 95.3 | 150.0 |
| 16000 | 95.7 | 98.2 | 100.3 | 101.3 | 103.1 | 104.1 | 102.1 | 104.5 | 107.1 | 110.5 | 106.9 | 101.2 | 94.2 | 150.3 |
| 20000 | 90.4 | 95.2 | 97.3 | 98.5 | 102.2 | 102.6 | 100.0 | 101.9 | 104.7 | 107.1 | 104.2 | 98.3 | 92.5 | 149.5 |
| 25000 | 89.8 | 91.7 | 94.2 | 94.9 | 98.5 | 100.1 | 97.4 | 97.5 | 101.8 | 102.5 | 100.1 | 94.1 | 90.4 | 148.4 |
| 31500 | 88.0 | 88.1 | 91.8 | 93.6 | 94.0 | 94.6 | 93.7 | 95.1 | 98.4 | 100.7 | 96.7 | 89.7 | 85.5 | 148.3 |
| 40000 | 83.0 | 83.1 | 87.4 | 87.7 | 91.9 | 92.1 | 88.4 | 90.0 | 93.6 | 95.0 | 91.7 | 84.1 | 81.0 | 147.6 |
| 50000 | 75.9 | 76.5 | 79.3 | 81.8 | 83.7 | 84.9 | 83.4 | 82.7 | 89.1 | 86.8 | 85.5 | 78.6 | 75.2 | 145.8 |
| 63000 | 70.1 | 70.3 | 73.5 | 75.5 | 75.7 | 75.4 | 77.7 | 76.4 | 84.1 | 82.1 | 79.0 | 72.6 | 68.8 | 144.9 |
| 80000 | 64.4 | 64.0 | 67.7 | 70.3 | 69.2 | 70.6 | 69.8 | 70.6 | 77.9 | 77.2 | 74.3 | 64.3 | 61.2 | 145.9 |
| GASPL | 111.6 | 112.1 | 113.1 | 112.8 | 113.8 | 114.9 | 115.0 | 118.1 | 122.5 | 128.1 | 130.9 | 127.9 | 122.1 | 165.7 |

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TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 31.00
 LOCATION C41 ANECH CH AERO: RDG. ADH126 PAMB 29.5600 RELHUM 63.80

MODEL TEST POINT 7407 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 92.68 M/SEC (304.0 FPS) FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEC. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X74070

ANGLES MEASURED FROM INLET, DEGREES,

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PVL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

CASPL

116.4

116.4

116.4

116.4

116.4

116.4

116.4

116.4

116.4

116.4

116.4

116.4

116.4

116.4

116.4

116.4

116.4

116.4

116.4

116.4

116.4

116.4

116.4

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 304.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 31.00
LOCATION C41 ANECH CH AERO. RDG. ADH126 PAMB 20.5600 RELHUM 63.60

MODEL TEST POINT 7407 12.2 M (40.0 FT) ACOUSTIC RANGE 154.7 SQ CH (23.99 SQ IN.) - MODEL 92.66 M/SEC (304.0 FPS) FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 35 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X74071

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 70.5 | 72.2 | 72.9 | 73.1 | 74.3 | 75.7 | 75.8 | 76.4 | 83.8 | 92.4 | 94.7 | 94.4 | 87.6 | 169.2 |
| 60 | 71.7 | 73.1 | 74.5 | 75.2 | 75.7 | 77.0 | 77.0 | 78.0 | 85.7 | 93.4 | 96.5 | 95.0 | 87.8 | 170.3 |
| 80 | 72.6 | 74.0 | 75.7 | 76.5 | 77.3 | 77.9 | 78.5 | 80.4 | 87.6 | 94.4 | 97.8 | 95.1 | 88.0 | 171.2 |
| 100 | 73.6 | 75.0 | 76.8 | 78.1 | 78.0 | 78.9 | 80.0 | 82.1 | 89.3 | 94.7 | 97.8 | 95.6 | 87.4 | 171.5 |
| 125 | 75.7 | 75.3 | 77.8 | 78.9 | 79.7 | 80.5 | 81.0 | 82.9 | 89.7 | 94.2 | 99.0 | 94.5 | 85.1 | 171.7 |
| 160 | 77.3 | 77.7 | 79.6 | 80.9 | 81.9 | 82.8 | 81.7 | 84.2 | 90.0 | 94.7 | 99.5 | 92.9 | 84.7 | 172.0 |
| 200 | 78.7 | 80.3 | 81.6 | 81.3 | 81.4 | 82.9 | 83.1 | 84.8 | 90.7 | 95.9 | 97.8 | 91.4 | 83.6 | 171.5 |
| 250 | 85.4 | 83.6 | 82.5 | 84.4 | 82.1 | 82.2 | 83.1 | 85.3 | 90.6 | 95.9 | 96.5 | 89.1 | 81.7 | 171.1 |
| 315 | 83.6 | 85.8 | 86.4 | 86.0 | 85.4 | 84.5 | 83.9 | 85.6 | 91.8 | 95.1 | 94.1 | 87.5 | 79.1 | 170.6 |
| 400 | 82.2 | 84.4 | 85.4 | 86.0 | 85.9 | 86.5 | 85.4 | 86.5 | 91.3 | 94.5 | 92.9 | 84.8 | 77.0 | 170.3 |
| 500 | 81.7 | 83.7 | 85.1 | 83.9 | 85.0 | 85.4 | 85.3 | 87.0 | 91.4 | 94.7 | 91.9 | 83.4 | 75.1 | 170.4 |
| 630 | 80.6 | 82.2 | 84.0 | 84.3 | 84.9 | 85.8 | 85.8 | 87.3 | 91.3 | 93.4 | 90.7 | 82.3 | 74.7 | 170.1 |
| 800 | 80.6 | 82.2 | 84.2 | 85.4 | 85.6 | 86.6 | 85.8 | 87.5 | 91.5 | 92.3 | 88.8 | 80.0 | 72.0 | 170.1 |
| 1000 | 79.9 | 82.6 | 85.3 | 85.5 | 86.7 | 86.9 | 85.8 | 87.5 | 90.0 | 91.8 | 86.5 | 78.8 | 70.2 | 170.0 |
| 1250 | 78.8 | 82.4 | 84.7 | 85.5 | 86.8 | 87.7 | 85.2 | 86.9 | 88.6 | 89.5 | 84.3 | 76.3 | 67.6 | 169.7 |
| 1600 | 78.6 | 80.9 | 83.7 | 84.7 | 85.7 | 86.7 | 84.1 | 85.0 | 87.3 | 88.4 | 82.2 | 74.4 | 64.7 | 169.7 |
| 2000 | 73.1 | 78.4 | 81.7 | 84.9 | 86.4 | 86.6 | 83.3 | 83.8 | 84.9 | 84.8 | 79.0 | 70.3 | 60.5 | 169.7 |
| 2500 | 72.0 | 77.4 | 81.0 | 81.5 | 84.9 | 84.5 | 80.7 | 80.6 | 82.2 | 80.1 | 74.3 | 64.8 | 55.5 | 169.6 |
| 3150 | 62.6 | 71.4 | 75.5 | 76.3 | 80.8 | 80.7 | 77.0 | 75.0 | 77.2 | 76.2 | 67.7 | 55.3 | 41.6 | 169.0 |
| 4000 | 55.1 | 62.4 | 67.8 | 70.9 | 72.0 | 72.3 | 70.1 | 69.0 | 69.6 | 66.7 | 57.4 | 41.7 | 23.5 | 167.9 |
| 5000 | 40.6 | 48.7 | 57.1 | 60.4 | 65.2 | 64.9 | 59.8 | 58.6 | 59.2 | 53.3 | 41.9 | 22.8 | | 167.8 |
| 6300 | 19.5 | 30.8 | 41.4 | 43.7 | 47.0 | 47.9 | 44.7 | 40.4 | 43.1 | 33.3 | 18.5 | | | 166.4 |
| 8000 | | | 11.0 | 17.3 | 20.5 | 21.6 | 20.9 | 14.9 | 17.0 | 5.0 | | | | 165.5 |
| 10000 | | | | | | | | | | | | | | 164.1 |

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CASPL 92.1 93.7 95.3 96.0 96.7 97.2 98.0 97.5 102.1 106.0 107.4 103.3 95.5 189.7
PNL 99.1 101.3 104.0 105.3 106.9 107.0 104.8 105.6 106.8 111.0 110.1 103.7 95.4
PNLT 98.8 101.3 104.8 105.9 106.2 106.1 104.8 105.6 109.3 111.0 110.1 103.7 95.4

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 3859 TAMB 31.00
LOCATION C41 ANECH CH AERO. RDG. ADH126 PAMB 29.5600 RELHUM 63.80

MODEL 7400 TEST POINT 7407 ACQUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 92.66 M/SEC (304.0 FPS) FREE-JET SPEED

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, S8 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-150-FMODL X74100
BACKGROUND FJB150-AMODL X01500

ANGLES MEASURED FROM INLET, DEGREES

FREQ .40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PHL

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

QASPL

118.0

117.4

118.3

116.2

118.3

119.3

119.1

121.4

125.0

132.3

133.1

130.9

126.6

168.8

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FREE-JET SPEED
45.11 M/SEC (148.0 FPS)

MODEL 7400
TEST POINT 7410

ACQUSTIC RANGE
12.2 M (40.0 FT) ARC

SIZE
154.7 SQ CH (23.99 SQ IN) - MODEL 45.11 M/SEC (148.0 FPS)

649

TEST DATE 02-27-78
LOCATION C41 ANECH CH
TAPE NO. N299
AERO. RDG. ADH128
ALPHA S559
PAMB 29.5700
TAMB 32.00
RELHUM 63.00

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 35 40.0 FT. ARC

IDENTIFICATION - FJ-150-FMODL X74100

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PML

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PML |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 90.7 | 94.4 | 93.7 | 95.2 | 93.3 | 94.6 | 96.5 | 96.2 | 100.0 | 106.9 | 111.7 | 117.0 | 117.2 | 149.7 |
| 315 | 92.3 | 92.7 | 92.9 | 93.4 | 94.7 | 96.2 | 96.5 | 97.6 | 102.6 | 110.7 | 114.3 | 116.1 | 116.1 | 161.2 |
| 400 | 94.1 | 93.9 | 95.0 | 93.7 | 94.7 | 96.5 | 97.0 | 99.2 | 105.1 | 114.6 | 118.1 | 120.0 | 118.7 | 163.5 |
| 500 | 94.9 | 94.8 | 95.8 | 95.5 | 95.6 | 97.3 | 96.5 | 100.1 | 106.3 | 116.9 | 120.5 | 121.7 | 119.0 | 155.4 |
| 630 | 96.5 | 96.1 | 97.2 | 96.6 | 97.2 | 98.7 | 99.3 | 103.0 | 108.6 | 118.2 | 122.2 | 121.8 | 119.5 | 156.4 |
| 800 | 100.1 | 96.6 | 98.3 | 98.4 | 98.3 | 100.0 | 101.1 | 104.3 | 110.7 | 120.3 | 122.6 | 118.9 | 157.3 | |
| 1000 | 107.0 | 103.6 | 104.2 | 102.0 | 101.1 | 102.1 | 102.4 | 105.6 | 111.5 | 120.7 | 123.1 | 121.7 | 116.3 | 157.3 |
| 1250 | 110.9 | 109.5 | 108.6 | 106.3 | 105.5 | 104.4 | 104.0 | 106.4 | 112.1 | 120.9 | 124.0 | 120.6 | 113.7 | 157.7 |
| 1600 | 114.9 | 111.8 | 111.8 | 109.6 | 105.4 | 105.3 | 105.1 | 107.7 | 112.5 | 121.0 | 123.1 | 117.9 | 111.0 | 157.4 |
| 2000 | 111.9 | 112.0 | 112.6 | 112.0 | 110.0 | 106.2 | 104.7 | 107.9 | 113.5 | 121.9 | 120.9 | 116.5 | 109.5 | 157.1 |
| 2500 | 110.0 | 110.3 | 111.2 | 111.2 | 111.3 | 111.1 | 107.7 | 108.3 | 113.5 | 121.6 | 119.4 | 115.2 | 107.7 | 156.6 |
| 3150 | 109.2 | 108.3 | 108.4 | 109.1 | 109.2 | 111.7 | 110.5 | 110.2 | 113.9 | 120.2 | 118.0 | 113.0 | 106.4 | 155.6 |
| 4000 | 107.9 | 106.8 | 108.0 | 107.4 | 107.3 | 108.4 | 110.9 | 113.6 | 118.8 | 117.0 | 111.0 | 104.6 | 154.5 | |
| 5000 | 107.5 | 106.7 | 107.4 | 107.5 | 107.3 | 108.5 | 109.4 | 111.2 | 113.5 | 118.4 | 115.9 | 109.9 | 104.5 | 154.3 |
| 6300 | 106.4 | 106.0 | 107.6 | 106.9 | 106.9 | 108.7 | 108.5 | 111.1 | 113.9 | 117.5 | 114.9 | 108.0 | 103.5 | 153.9 |
| 8000 | 105.8 | 106.2 | 106.7 | 107.1 | 106.9 | 107.9 | 108.0 | 110.8 | 113.5 | 116.5 | 113.8 | 107.0 | 102.5 | 153.6 |
| 10000 | 104.7 | 105.4 | 106.0 | 106.4 | 107.3 | 108.5 | 107.5 | 110.0 | 112.6 | 116.6 | 112.2 | 106.3 | 102.2 | 153.7 |
| 12500 | 102.7 | 103.6 | 104.7 | 104.9 | 106.8 | 107.5 | 106.6 | 108.5 | 110.6 | 114.4 | 110.3 | 104.6 | 101.6 | 152.8 |
| 16000 | 101.3 | 102.3 | 104.4 | 105.1 | 106.7 | 107.1 | 105.7 | 107.4 | 109.2 | 113.4 | 108.7 | 103.4 | 100.1 | 152.3 |
| 20000 | 97.6 | 101.2 | 101.7 | 103.5 | 106.3 | 106.9 | 103.2 | 104.7 | 107.1 | 110.3 | 105.8 | 101.3 | 99.7 | 152.9 |
| 25000 | 95.8 | 97.3 | 99.6 | 99.5 | 104.2 | 103.7 | 100.7 | 100.3 | 105.0 | 106.6 | 102.8 | 97.7 | 94.6 | 152.2 |
| 31500 | 93.3 | 92.6 | 96.3 | 98.3 | 99.0 | 98.9 | 97.6 | 97.9 | 100.4 | 105.5 | 98.6 | 93.1 | 90.9 | 152.2 |
| 40000 | 89.0 | 89.4 | 92.1 | 93.2 | 97.9 | 97.2 | 92.6 | 93.4 | 96.0 | 99.9 | 94.1 | 88.0 | 84.5 | 152.2 |
| 50000 | 82.2 | 82.8 | 85.0 | 86.6 | 90.6 | 90.3 | 87.6 | 86.6 | 91.4 | 93.9 | 88.2 | 82.8 | 79.1 | 150.3 |
| 63000 | 76.4 | 77.1 | 79.4 | 80.8 | 84.3 | 83.3 | 82.4 | 80.5 | 87.2 | 88.7 | 81.7 | 76.5 | 72.8 | 150.1 |
| 80000 | 71.4 | 71.5 | 74.2 | 76.6 | 80.5 | 80.4 | 74.8 | 75.3 | 83.3 | 83.6 | 77.0 | 66.5 | 62.9 | 152.3 |

GASPL 120.5 119.5 120.0 119.6 119.3 119.9 119.2 120.9 124.6 131.5 132.3 130.7 127.4 168.8

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 148.00 REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 46.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 32.00
 LOCATION C41 ANECH CH AERO. RDG. ADH128 PAMB 29.5700 RELHUM 63.00

MODEL TEST POINT 7410 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CH (23.99 SQ IN) - MODEL 45.11 M/SEC (148.0 FPS)
 SIZE FREE-JET SPEED

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07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-150-FMODL X74101

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|------|-------|-------|
| 50 | 72.3 | 73.7 | 75.8 | 75.2 | 76.7 | 78.6 | 78.9 | 80.8 | 85.9 | 84.3 | 96.3 | 96.0 | 91.4 | 171.2 |
| 63 | 73.1 | 74.5 | 76.6 | 77.1 | 77.5 | 79.4 | 80.5 | 81.6 | 87.1 | 96.6 | 98.7 | 97.7 | 91.6 | 173.0 |
| 80 | 74.7 | 75.8 | 77.9 | 78.1 | 79.1 | 80.7 | 81.2 | 84.5 | 89.6 | 97.9 | 100.3 | 97.8 | 92.0 | 174.0 |
| 100 | 76.2 | 76.2 | 79.0 | 79.9 | 80.2 | 82.0 | 82.9 | 85.7 | 91.4 | 100.0 | 100.9 | 98.4 | 91.3 | 175.0 |
| 125 | 85.0 | 83.2 | 84.8 | 83.3 | 82.9 | 84.0 | 84.2 | 86.9 | 92.2 | 100.3 | 101.0 | 97.4 | 88.4 | 175.0 |
| 160 | 86.7 | 88.9 | 89.3 | 87.6 | 87.1 | 86.2 | 85.7 | 87.6 | 92.5 | 100.3 | 101.7 | 96.0 | 85.5 | 175.4 |
| 200 | 92.4 | 91.0 | 92.1 | 90.6 | 86.9 | 87.0 | 86.6 | 88.8 | 93.0 | 100.2 | 100.6 | 93.0 | 82.3 | 175.1 |
| 250 | 89.0 | 90.9 | 92.7 | 92.9 | 91.3 | 87.6 | 86.0 | 88.7 | 93.6 | 100.8 | 98.1 | 91.1 | 80.2 | 174.7 |
| 315 | 85.6 | 86.8 | 90.9 | 91.8 | 92.3 | 92.3 | 88.7 | 88.9 | 93.3 | 100.2 | 96.1 | 89.3 | 77.5 | 174.2 |
| 400 | 85.4 | 86.4 | 87.8 | 89.4 | 89.9 | 92.6 | 91.3 | 90.4 | 93.3 | 98.4 | 94.3 | 86.5 | 75.3 | 173.3 |
| 500 | 83.7 | 84.5 | 87.1 | 87.3 | 87.7 | 89.1 | 90.7 | 90.9 | 92.7 | 96.5 | 92.8 | 83.8 | 72.4 | 172.2 |
| 630 | 82.8 | 84.0 | 86.1 | 87.1 | 87.5 | 88.8 | 88.8 | 90.9 | 92.2 | 95.8 | 91.2 | 82.0 | 71.3 | 171.9 |
| 800 | 81.2 | 83.0 | 85.1 | 86.3 | 86.8 | 88.9 | 88.4 | 90.5 | 92.4 | 94.5 | 89.7 | 79.4 | 69.1 | 171.8 |
| 1000 | 80.1 | 82.9 | 84.9 | 86.3 | 86.7 | 87.8 | 87.8 | 90.0 | 91.7 | 93.2 | 88.1 | 77.8 | 67.0 | 171.3 |
| 1250 | 78.5 | 81.7 | 84.0 | 85.4 | 86.9 | 88.3 | 87.1 | 89.1 | 90.8 | 92.9 | 86.1 | 76.2 | 65.2 | 171.4 |
| 1600 | 75.7 | 79.6 | 82.3 | 83.6 | 86.1 | 87.1 | 85.9 | 87.2 | 88.1 | 90.2 | 83.3 | 73.2 | 62.3 | 170.5 |
| 2000 | 73.3 | 77.8 | 81.6 | 83.6 | 85.9 | 86.5 | 84.9 | 85.9 | 86.4 | 88.6 | 80.7 | 70.4 | 67.8 | 170.9 |
| 2500 | 67.8 | 75.2 | 78.0 | 81.3 | 84.9 | 85.8 | 81.9 | 82.5 | 83.4 | 84.2 | 78.0 | 65.4 | 52.5 | 170.6 |
| 3150 | 62.7 | 68.8 | 74.0 | 75.7 | 81.4 | 81.3 | 77.9 | 76.6 | 79.4 | 78.1 | 69.6 | 56.9 | 38.9 | 169.9 |
| 4000 | 53.9 | 59.3 | 66.9 | 71.3 | 73.3 | 73.7 | 71.9 | 70.9 | 71.0 | 72.2 | 59.4 | 43.4 | 20.8 | 169.8 |
| 5000 | 39.9 | 48.6 | 56.4 | 60.8 | 67.2 | 67.0 | 61.9 | 61.0 | 60.4 | 59.1 | 45.0 | 24.6 | 169.8 | |
| 6300 | 15.2 | 27.8 | 37.3 | 43.4 | 50.0 | 50.3 | 46.8 | 43.4 | 43.7 | 38.9 | 21.3 | | 168.0 | |
| 8000 | | | 10.4 | 15.3 | 25.4 | 25.5 | 23.5 | 18.1 | 18.2 | 8.9 | | | 167.7 | |
| 10000 | | | | | | | | | | | | | 170.0 | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GASPL 97.3 97.8 99.5 99.7 99.7 100.4 99.5 100.8 103.9 110.1 109.7 105.7 95.6 166.3
PNL 102.0 103.1 105.5 106.4 108.3 109.1 107.3 106.3 110.3 114.9 112.2 105.6 96.8
PNLT 103.2 104.3 105.5 106.4 109.5 110.2 107.3 106.3 110.3 115.4 113.2 105.8 96.8

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 32.00
LOCATION C41 ANECH CH AERG. RDG. ADH126 PAMB 29.5700 RELHUM 63.00

MODEL TEST POINT ACQUSTIC RANGE SIZE FREE-JET SPEED
7400 7410 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 45.11 M/SEC (148.0 FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X74110
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 86.5 | 89.6 | 89.1 | 92.1 | 91.0 | 93.6 | 96.0 | 96.4 | 100.6 | 108.1 | 113.3 | 117.6 | 117.1 | 150.2 |
| 315 | 87.6 | 88.4 | 89.4 | 90.5 | 92.1 | 94.2 | 95.1 | 97.5 | 102.4 | 110.5 | 114.9 | 116.8 | 117.2 | 151.4 |
| 400 | 89.6 | 90.2 | 91.4 | 90.7 | 93.1 | 94.7 | 95.8 | 98.2 | 103.7 | 114.8 | 118.2 | 120.6 | 116.7 | 153.5 |
| 500 | 90.2 | 90.3 | 92.2 | 92.6 | 93.7 | 95.6 | 97.2 | 99.8 | 105.3 | 116.8 | 120.2 | 120.7 | 115.6 | 154.5 |
| 630 | 91.6 | 92.1 | 93.4 | 93.7 | 94.5 | 97.4 | 98.5 | 101.9 | 108.4 | 118.2 | 121.6 | 120.3 | 113.7 | 155.3 |
| 800 | 95.8 | 93.9 | 95.4 | 95.7 | 96.3 | 98.6 | 99.6 | 103.7 | 110.4 | 119.7 | 123.1 | 120.8 | 112.2 | 156.5 |
| 1000 | 99.0 | 99.0 | 99.5 | 99.0 | 98.6 | 100.0 | 101.4 | 105.3 | 111.5 | 120.3 | 123.7 | 119.1 | 110.0 | 156.7 |
| 1250 | 107.5 | 107.3 | 105.1 | 102.6 | 102.2 | 103.3 | 103.0 | 106.4 | 112.1 | 120.9 | 125.0 | 118.2 | 107.9 | 157.7 |
| 1600 | 111.3 | 109.9 | 110.2 | 108.7 | 104.6 | 104.7 | 104.6 | 107.2 | 113.0 | 121.0 | 124.8 | 116.5 | 107.2 | 157.8 |
| 2000 | 108.3 | 109.5 | 110.0 | 110.6 | 109.4 | 105.8 | 104.4 | 107.3 | 113.5 | 122.1 | 122.8 | 114.8 | 106.1 | 157.3 |
| 2500 | 105.4 | 106.2 | 107.5 | 108.7 | 110.1 | 110.9 | 108.1 | 108.5 | 113.2 | 122.1 | 120.5 | 113.2 | 105.2 | 156.5 |
| 3150 | 105.0 | 105.2 | 105.0 | 106.3 | 107.1 | 110.0 | 110.9 | 110.0 | 114.0 | 120.1 | 119.3 | 111.8 | 103.5 | 155.4 |
| 4000 | 104.1 | 103.6 | 105.2 | 104.9 | 105.2 | 106.8 | 109.0 | 110.9 | 113.7 | 119.3 | 118.0 | 109.9 | 101.6 | 154.5 |
| 5000 | 103.5 | 102.9 | 104.2 | 104.4 | 105.6 | 106.8 | 107.7 | 111.6 | 113.9 | 118.3 | 116.9 | 108.1 | 100.6 | 154.0 |
| 6300 | 102.5 | 103.1 | 104.4 | 104.5 | 104.6 | 107.2 | 107.6 | 110.6 | 114.0 | 117.5 | 115.8 | 107.1 | 99.2 | 153.6 |
| 8000 | 102.3 | 103.3 | 103.7 | 104.0 | 105.5 | 106.2 | 107.0 | 109.8 | 113.4 | 116.5 | 114.5 | 106.3 | 98.6 | 153.1 |
| 10000 | 101.7 | 102.7 | 103.9 | 103.9 | 105.5 | 107.1 | 105.8 | 109.4 | 111.9 | 115.1 | 112.7 | 104.4 | 97.2 | 152.5 |
| 12500 | 99.5 | 101.1 | 101.7 | 103.0 | 104.5 | 105.6 | 105.1 | 107.3 | 109.9 | 112.9 | 110.4 | 102.8 | 95.8 | 151.5 |
| 16000 | 97.8 | 100.3 | 101.8 | 102.3 | 103.7 | 105.2 | 103.4 | 106.3 | 108.7 | 112.3 | 108.4 | 101.0 | 94.9 | 151.8 |
| 20000 | 93.2 | 97.5 | 98.6 | 100.1 | 103.8 | 104.1 | 101.0 | 103.4 | 105.8 | 108.4 | 104.8 | 98.1 | 93.0 | 150.8 |
| 25000 | 92.4 | 93.5 | 96.0 | 96.0 | 100.8 | 101.1 | 98.5 | 98.5 | 103.4 | 103.8 | 101.1 | 94.4 | 90.7 | 149.7 |
| 31500 | 90.5 | 90.2 | 93.9 | 94.9 | 95.3 | 95.8 | 95.0 | 95.9 | 99.7 | 102.0 | 97.2 | 89.5 | 86.1 | 149.5 |
| 40000 | 85.6 | 85.4 | 88.7 | 90.0 | 93.9 | 93.8 | 89.9 | 90.8 | 94.9 | 96.6 | 92.2 | 84.4 | 81.8 | 149.2 |
| 50000 | 79.2 | 78.3 | 81.3 | 83.1 | 85.7 | 86.5 | 85.2 | 83.7 | 89.9 | 90.1 | 86.8 | 79.1 | 76.7 | 147.1 |
| 63000 | 73.7 | 72.7 | 75.0 | 76.8 | 77.8 | 78.4 | 79.0 | 77.7 | 83.2 | 83.4 | 79.6 | 72.9 | 69.9 | 146.2 |
| 80000 | 68.7 | 66.0 | 69.8 | 72.8 | 72.0 | 72.9 | 71.6 | 71.9 | 79.0 | 78.5 | 74.6 | 64.8 | 61.7 | 147.3 |
| GASPL | 116.7 | 116.7 | 117.2 | 117.3 | 117.6 | 118.5 | 116.3 | 120.5 | 124.5 | 131.4 | 133.1 | 129.4 | 124.2 | 168.1 |

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TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 32.00
LOCATION C41 ANECH CH AERO. RDG. ADH129 PAMB 29.5700 RELHUM 61.50

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
7400 7411 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 99.67 M/SEC (327.0 FPS)

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, S8 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X74110

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 92.8 | 94.6 | 93.0 | 94.7 | 92.3 | 93.6 | 94.4 | 95.4 | 99.5 | 106.6 | 110.7 | 115.0 | 114.9 | 148.0 |
| 315 | 92.8 | 94.6 | 93.0 | 93.2 | 93.6 | 94.3 | 93.9 | 95.1 | 101.5 | 111.3 | 114.6 | 117.8 | 116.0 | 150.9 |
| 400 | 93.8 | 93.5 | 93.4 | 93.4 | 94.5 | 94.9 | 95.1 | 96.4 | 103.8 | 114.9 | 118.2 | 119.7 | 117.3 | 153.3 |
| 500 | 95.3 | 95.0 | 95.2 | 95.4 | 95.2 | 96.0 | 96.5 | 98.4 | 107.1 | 116.7 | 120.2 | 120.6 | 117.7 | 154.7 |
| 630 | 96.4 | 95.4 | 96.3 | 96.5 | 96.0 | 97.6 | 97.8 | 100.4 | 109.3 | 118.4 | 122.2 | 122.1 | 118.5 | 156.4 |
| 800 | 97.7 | 97.3 | 97.4 | 98.0 | 97.6 | 99.0 | 98.1 | 102.1 | 110.5 | 119.1 | 123.1 | 121.3 | 116.3 | 156.7 |
| 1000 | 100.4 | 97.9 | 98.6 | 101.2 | 99.9 | 100.4 | 100.7 | 103.6 | 110.9 | 119.4 | 124.0 | 119.9 | 115.3 | 156.9 |
| 1250 | 106.0 | 103.1 | 102.6 | 105.1 | 103.6 | 103.9 | 102.3 | 104.6 | 111.9 | 119.6 | 123.7 | 118.1 | 115.0 | 156.7 |
| 1600 | 113.3 | 112.1 | 108.8 | 111.3 | 106.1 | 105.4 | 104.0 | 105.6 | 112.6 | 120.6 | 121.8 | 116.3 | 113.3 | 156.7 |
| 2000 | 117.1 | 114.7 | 113.9 | 112.9 | 111.0 | 106.6 | 104.0 | 105.8 | 112.5 | 120.9 | 119.7 | 114.9 | 112.6 | 157.0 |
| 2500 | 112.7 | 113.3 | 113.0 | 112.0 | 112.3 | 112.0 | 107.9 | 107.2 | 113.6 | 119.4 | 116.9 | 113.8 | 111.3 | 156.2 |
| 3150 | 111.5 | 111.5 | 111.8 | 109.8 | 109.5 | 111.3 | 111.0 | 109.0 | 113.7 | 119.0 | 118.0 | 112.5 | 110.0 | 155.5 |
| 4000 | 111.0 | 110.5 | 109.4 | 108.4 | 107.8 | 108.6 | 109.5 | 110.3 | 114.5 | 118.6 | 117.6 | 111.3 | 109.6 | 155.0 |
| 5000 | 109.2 | 108.4 | 109.3 | 108.3 | 108.5 | 109.0 | 108.7 | 111.5 | 115.2 | 118.3 | 116.8 | 110.5 | 108.4 | 154.9 |
| 6300 | 108.5 | 108.2 | 108.7 | 108.9 | 108.1 | 109.9 | 109.2 | 111.1 | 114.7 | 117.4 | 115.6 | 108.9 | 107.9 | 154.6 |
| 8000 | 108.3 | 108.4 | 109.0 | 108.5 | 109.3 | 109.2 | 108.7 | 110.4 | 113.5 | 116.3 | 114.0 | 108.2 | 106.7 | 154.1 |
| 10000 | 107.9 | 108.5 | 108.3 | 108.4 | 109.2 | 110.1 | 107.6 | 109.9 | 111.6 | 114.3 | 112.1 | 108.9 | 105.5 | 153.7 |
| 12500 | 107.1 | 107.6 | 108.2 | 107.5 | 108.2 | 108.6 | 107.0 | 107.9 | 111.1 | 114.2 | 110.6 | 108.7 | 105.2 | 153.7 |
| 16000 | 104.3 | 105.4 | 105.5 | 106.8 | 107.4 | 108.2 | 105.3 | 107.0 | 108.7 | 110.8 | 107.5 | 103.2 | 103.6 | 153.0 |
| 20000 | 102.2 | 104.2 | 105.2 | 105.4 | 106.0 | 107.1 | 103.0 | 104.2 | 107.1 | 107.1 | 104.6 | 100.4 | 102.5 | 153.1 |
| 25000 | 99.2 | 102.7 | 102.7 | 101.4 | 105.0 | 104.1 | 100.5 | 99.4 | 104.0 | 105.6 | 101.3 | 96.0 | 98.2 | 152.6 |
| 31500 | 97.6 | 97.9 | 99.4 | 99.3 | 99.1 | 98.8 | 97.0 | 96.6 | 100.2 | 101.4 | 97.3 | 91.8 | 94.9 | 151.7 |
| 40000 | 92.7 | 91.9 | 95.0 | 95.4 | 98.1 | 96.8 | 92.0 | 91.7 | 95.5 | 95.3 | 92.2 | 86.9 | 90.1 | 151.7 |
| 50000 | 89.8 | 88.5 | 90.8 | 88.5 | 89.9 | 89.5 | 87.2 | 84.6 | 91.8 | 89.6 | 85.9 | 81.6 | 84.3 | 150.4 |
| 63000 | 82.3 | 80.5 | 82.5 | 81.2 | 81.5 | 81.4 | 81.0 | 78.5 | 87.0 | 86.1 | 82.4 | 75.1 | 77.6 | 149.3 |
| 80000 | 73.0 | 71.6 | 73.4 | 77.3 | 75.7 | 75.9 | 73.8 | 72.8 | 77.2 | 78.3 | 72.6 | 68.2 | 67.8 | 148.3 |
| CASPL | 122.2 | 121.4 | 121.1 | 120.7 | 120.3 | 120.4 | 119.0 | 120.2 | 124.7 | 130.6 | 132.2 | 129.7 | 126.9 | 168.5 |

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 327.00 REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 3859 TAMB 32.00
 LOCATION C41 ANECH CH AERO. RDG. ADH129 PAMB 29.5700 RELHUM 81.50

MODEL TEST POINT 7411 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 99.67 M/SEC (327.0 FPS) FREE-JET SPEED

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07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X74111

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|-------|------|------|-------|
| 50 | 72.0 | 73.3 | 74.2 | 74.9 | 76.5 | 77.0 | 77.0 | 78.0 | 84.6 | 94.7 | 96.4 | 96.7 | 90.0 | 170.9 |
| 63 | 73.5 | 74.8 | 76.0 | 76.9 | 77.1 | 78.1 | 78.4 | 79.9 | 87.9 | 96.4 | 98.4 | 96.5 | 90.4 | 172.4 |
| 80 | 74.5 | 76.1 | 77.0 | 78.0 | 77.9 | 79.7 | 79.7 | 81.9 | 90.0 | 98.1 | 100.3 | 98.0 | 91.0 | 174.0 |
| 100 | 75.8 | 76.9 | 78.1 | 79.5 | 79.5 | 81.0 | 80.9 | 83.5 | 91.2 | 98.7 | 101.1 | 97.1 | 90.6 | 174.4 |
| 125 | 76.4 | 77.4 | 79.3 | 82.5 | 81.6 | 82.3 | 82.5 | 84.9 | 91.5 | 99.0 | 102.0 | 95.6 | 87.9 | 174.6 |
| 160 | 83.8 | 82.5 | 82.1 | 86.4 | 85.3 | 85.7 | 83.9 | 85.8 | 92.4 | 99.0 | 101.5 | 93.6 | 86.8 | 174.4 |
| 200 | 90.8 | 91.3 | 88.1 | 92.4 | 87.6 | 87.0 | 85.6 | 86.7 | 92.9 | 99.9 | 99.3 | 91.4 | 84.6 | 174.3 |
| 250 | 94.3 | 93.6 | 94.0 | 93.7 | 92.3 | 88.1 | 85.3 | 86.7 | 92.5 | 99.8 | 96.9 | 89.6 | 83.3 | 174.6 |
| 315 | 89.4 | 91.8 | 92.8 | 92.6 | 93.3 | 93.2 | 88.9 | 87.8 | 93.4 | 97.9 | 95.6 | 87.9 | 81.2 | 173.8 |
| 400 | 87.8 | 89.6 | 91.2 | 90.0 | 90.3 | 92.2 | 91.7 | 89.3 | 93.2 | 97.2 | 94.3 | 85.9 | 79.8 | 173.2 |
| 500 | 86.8 | 88.3 | 88.5 | 88.3 | 88.3 | 89.2 | 90.0 | 90.3 | 93.6 | 96.4 | 93.4 | 84.1 | 77.4 | 172.7 |
| 630 | 84.5 | 85.7 | 88.0 | 88.0 | 88.7 | 89.3 | 88.9 | 91.2 | 94.0 | 95.7 | 92.1 | 82.6 | 75.2 | 172.6 |
| 800 | 84.3 | 85.2 | 87.2 | 88.3 | 88.0 | 90.0 | 89.1 | 90.5 | 93.2 | 94.4 | 90.4 | 80.4 | 73.5 | 172.3 |
| 1000 | 82.6 | 85.1 | 87.3 | 87.7 | 89.1 | 89.1 | 88.5 | 89.6 | 91.7 | 92.9 | 88.4 | 78.9 | 71.2 | 171.8 |
| 1250 | 81.8 | 84.8 | 86.3 | 87.4 | 88.9 | 90.0 | 87.2 | 89.0 | 89.6 | 90.7 | 85.9 | 78.9 | 68.6 | 171.3 |
| 1600 | 80.0 | 83.3 | 85.7 | 86.2 | 87.6 | 88.2 | 86.3 | 86.6 | 88.7 | 90.0 | 83.6 | 74.2 | 65.9 | 171.3 |
| 2000 | 76.4 | 80.6 | 82.7 | 85.3 | 86.6 | 87.8 | 84.5 | 85.4 | 85.9 | 86.0 | 79.5 | 70.2 | 61.5 | 170.7 |
| 2500 | 72.4 | 78.2 | 81.5 | 83.3 | 86.6 | 86.0 | 81.6 | 82.0 | 83.4 | 81.0 | 74.8 | 64.5 | 55.3 | 170.8 |
| 3150 | 66.1 | 74.2 | 77.2 | 77.6 | 82.2 | 81.7 | 77.8 | 76.7 | 78.4 | 77.3 | 68.2 | 55.2 | 42.6 | 170.3 |
| 4000 | 58.2 | 64.7 | 70.0 | 72.3 | 73.4 | 73.6 | 71.3 | 69.6 | 70.8 | 68.2 | 57.9 | 42.1 | 24.8 | 169.4 |
| 5000 | 43.6 | 51.1 | 59.4 | 62.9 | 67.4 | 66.7 | 61.3 | 59.2 | 59.9 | 54.5 | 43.1 | 23.4 | | 169.4 |
| 6300 | 22.9 | 33.6 | 43.1 | 45.3 | 49.1 | 49.5 | 46.4 | 41.3 | 44.1 | 34.5 | 19.0 | | | 168.0 |
| 8000 | | 0.7 | 13.5 | 18.8 | 22.6 | 23.7 | 22.1 | 16.1 | 18.0 | 6.2 | | | | 167.0 |
| 10000 | | | | | | | | | | | | | | 166.0 |

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CASPL 98.6 99.5 100.3 100.8 100.6 100.6 99.3 99.9 104.0 109.2 109.6 104.7 98.1 186.0
 PNL 104.2 105.5 106.6 107.8 109.4 109.4 109.4 106.9 107.5 110.4 113.7 111.7 104.7 97.7
 PNLT 104.9 106.3 107.5 107.8 110.8 110.6 107.4 107.6 111.0 113.7 112.8 104.7 97.7

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 IALPHA SB59 TAMB 32.00
 LOCATION C41 ANECH CH AERO. RDG. ADH129 PAMB 29.5700 RELHUM 61.60

MODEL TEST POINT 7411 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CH (1400.00 SQ IN) - FULL SIZE 99.67 M/SEC (327.0 FPS) FREE-JET SPEED

07/19/79 18.682

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARCIDENTIFICATION - MODEL FJ-ZER-FMODL X75010
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PUL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

111.4

112.7

112.5

112.2

112.8

113.2

113.1

114.8

119.8

123.0

126.5

127.7

125.0

162.9

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LOCATION C41 ANECH CHTAPE NO. N294
AERO. RDG. ADH068I ALPHA SB59
PAMB 29.6320TAMB 28.04
RELHUM 23.50MODEL TEST POINT
7500ACOUSTIC RANGE
12.2 M (40.0 FT) ARCSIZE
154.7 SQ CM (23.99 SQ IN) - MODELFREE-JET SPEED
0. M/SEC (0. FPS)63
50

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X75010

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | | | | | | | | | | | | | | |
| 315 | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | | |
| 630 | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | |
| 1000 | | | | | | | | | | | | | | |
| 1250 | | | | | | | | | | | | | | |
| 1600 | | | | | | | | | | | | | | |
| 2000 | | | | | | | | | | | | | | |
| 2500 | | | | | | | | | | | | | | |
| 3150 | | | | | | | | | | | | | | |
| 4000 | | | | | | | | | | | | | | |
| 5000 | | | | | | | | | | | | | | |
| 6300 | | | | | | | | | | | | | | |
| 8000 | | | | | | | | | | | | | | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |
| GASPL | 111.4 | 112.7 | 112.5 | 112.2 | 112.8 | 113.2 | 113.1 | 114.8 | 119.8 | 123.0 | 126.5 | 127.7 | 125.0 | 162.9 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (EI/SEC) | REFRACTION CORRECTION - YES |
|------------------------------|------------------------------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) 40.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 02-20-78 | TAPE NO. | N294 | ALPHA | SB59 | TAMB | 28.04 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH068 | PAMB | 29.6320 | RELHUM | 23.50 |

| MODEL | TEST POINT | ACQUSTIC RANGE | SIZE | FREE-JET SPEED |
|-------|------------|-----------------------|------------------------------------|--------------------|
| 7500 | 7501 | 12.2 M (40.0 FT) ARC | 154.7 SQ CM (23.99 SQ IN) - MODEL | 0. M/SEC (0. FPS) |

07/19/79 19.662

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB, 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X75011

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 65.4 | 69.7 | 70.8 | 70.8 | 72.8 | 75.3 | 77.0 | 78.3 | 83.8 | 89.5 | 91.9 | 92.6 | 87.0 | 187.2 |
| 63 | 68.4 | 70.0 | 72.4 | 72.6 | 74.6 | 76.4 | 77.9 | 79.4 | 84.9 | 91.1 | 94.0 | 93.4 | 87.2 | 186.5 |
| 80 | 67.5 | 72.1 | 73.2 | 73.9 | 79.0 | 77.7 | 78.9 | 80.4 | 86.4 | 91.4 | 94.0 | 94.0 | 87.7 | 188.9 |
| 100 | 71.2 | 72.3 | 74.7 | 75.4 | 76.4 | 78.2 | 79.9 | 81.9 | 88.2 | 91.9 | 94.5 | 93.9 | 87.6 | 169.3 |
| 125 | 74.5 | 76.6 | 78.7 | 78.7 | 79.0 | 79.7 | 81.0 | 82.7 | 88.7 | 91.7 | 93.5 | 93.1 | 87.0 | 168.9 |
| 160 | 71.6 | 76.6 | 77.5 | 78.5 | 80.2 | 82.5 | 82.7 | 84.0 | 88.4 | 91.4 | 94.2 | 93.0 | 86.3 | 169.2 |
| 200 | 75.5 | 76.5 | 76.4 | 77.7 | 78.5 | 80.7 | 82.2 | 84.5 | 89.3 | 91.1 | 93.4 | 92.2 | 85.4 | 169.0 |
| 250 | 77.9 | 79.4 | 79.3 | 78.6 | 78.6 | 79.9 | 81.1 | 83.8 | 89.2 | 91.2 | 92.4 | 90.4 | 82.9 | 168.3 |
| 315 | 79.1 | 80.4 | 80.8 | 80.2 | 80.0 | 80.8 | 82.5 | 84.0 | 89.0 | 90.8 | 92.2 | 89.0 | 80.9 | 168.3 |
| 400 | 80.3 | 82.2 | 81.8 | 81.9 | 80.7 | 81.5 | 82.2 | 83.9 | 88.7 | 89.4 | 90.7 | 86.8 | 78.2 | 167.7 |
| 500 | 79.1 | 81.6 | 82.7 | 81.6 | 81.2 | 81.4 | 81.7 | 83.1 | 87.6 | 88.0 | 88.7 | 84.2 | 75.5 | 166.7 |
| 630 | 76.4 | 80.3 | 81.7 | 82.9 | 82.5 | 82.5 | 82.0 | 83.1 | 86.9 | 87.2 | 87.0 | 82.5 | 73.2 | 166.3 |
| 800 | 74.9 | 78.9 | 80.9 | 81.8 | 82.6 | 83.4 | 82.4 | 82.8 | 86.3 | 85.5 | 85.4 | 80.6 | 71.3 | 165.9 |
| 1000 | 74.3 | 78.9 | 80.1 | 81.0 | 82.1 | 82.4 | 82.1 | 82.3 | 85.5 | 84.0 | 83.3 | 78.2 | 69.4 | 165.3 |
| 1250 | 71.3 | 77.6 | 79.7 | 80.7 | 81.9 | 83.0 | 81.4 | 82.4 | 83.6 | 82.4 | 80.6 | 76.3 | 67.1 | 165.0 |
| 1600 | 68.0 | 75.8 | 77.6 | 79.4 | 81.6 | 81.7 | 80.4 | 80.9 | 81.3 | 79.7 | 77.7 | 72.7 | 63.3 | 164.3 |
| 2000 | 65.5 | 73.4 | 76.2 | 78.6 | 81.3 | 81.3 | 78.5 | 79.4 | 79.0 | 77.6 | 74.2 | 69.2 | 58.4 | 164.3 |
| 2500 | 58.7 | 69.2 | 72.1 | 75.0 | 79.6 | 79.7 | 76.1 | 76.1 | 75.2 | 73.0 | 69.3 | 63.3 | 50.4 | 163.7 |
| 3150 | 53.9 | 62.8 | 67.5 | 69.7 | 75.6 | 75.6 | 72.6 | 69.5 | 71.5 | 66.3 | 62.1 | 53.9 | 39.3 | 163.0 |
| 4000 | 48.2 | 54.1 | 61.2 | 65.2 | 67.1 | 67.0 | 65.5 | 64.0 | 63.0 | 59.9 | 53.4 | 40.5 | 19.5 | 162.2 |
| 5000 | 30.9 | 42.2 | 49.4 | 54.1 | 60.1 | 60.6 | 55.4 | 53.6 | 52.1 | 46.8 | 38.5 | 21.6 | | 162.2 |
| 6300 | 6.2 | 20.8 | 29.9 | 37.1 | 42.0 | 43.0 | 41.0 | 36.2 | 35.9 | 26.5 | 15.3 | | | 160.2 |
| 8000 | | | | | | | | | | | | | | 159.0 |
| 10000 | | | | | | | | | | | | | | 160.2 |
| 12500 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GASPL 67.5 90.3 91.4 91.9 92.9 93.6 93.6 94.9 99.4 101.7 103.6 102.5 96.0 180.3
PNL 93.1 96.8 98.6 100.2 102.4 102.6 101.2 102.0 104.8 105.6 106.3 103.7 96.2
PNLT 94.2 97.8 98.6 100.2 103.6 104.0 101.8 102.0 105.4 105.6 106.3 103.7 96.2

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-20-78 TAPE NO. N294 ALPHA 9859 TAMB 28.04
LOCATION C41 ANECH CH AERO. RDG. ADH068 PAMB 29.6320 RELHUM 23.50

MODEL TEST POINT 7501 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CH (1400.00 SQ IN) - FULL 0. FREE-JET SPEED 0. M/SEC (0. FPS)

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 75 PERCENT R.H. STD. DAY, 88 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X75020

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 87.4 | 88.8 | 86.8 | 87.0 | 85.7 | 87.1 | 86.7 | 87.3 | 83.5 | 87.2 | 101.6 | 106.2 | 105.7 | 139.2 |
| 315 | 87.4 | 86.8 | 86.8 | 86.9 | 86.8 | 87.5 | 87.1 | 87.9 | 85.3 | 101.6 | 106.6 | 104.5 | 106.1 | 141.5 |
| 400 | 86.5 | 88.0 | 87.6 | 86.5 | 87.1 | 88.3 | 87.9 | 89.5 | 97.1 | 104.8 | 109.0 | 110.7 | 106.2 | 143.9 |
| 500 | 89.5 | 86.7 | 86.7 | 87.5 | 86.1 | 89.5 | 89.3 | 91.3 | 99.2 | 105.2 | 109.1 | 109.6 | 105.0 | 143.7 |
| 630 | 90.5 | 89.6 | 89.9 | 88.8 | 92.6 | 90.4 | 90.1 | 92.7 | 101.6 | 106.4 | 110.5 | 109.1 | 104.8 | 144.5 |
| 800 | 91.9 | 91.0 | 90.4 | 90.0 | 90.9 | 91.6 | 91.9 | 93.4 | 102.8 | 107.2 | 109.4 | 107.2 | 105.3 | 144.1 |
| 1000 | 93.3 | 90.9 | 92.2 | 91.3 | 91.1 | 93.1 | 93.1 | 94.8 | 102.8 | 106.5 | 109.4 | 106.2 | 104.1 | 143.6 |
| 1250 | 94.4 | 92.2 | 93.2 | 91.4 | 92.9 | 94.3 | 93.8 | 96.2 | 104.2 | 106.8 | 108.6 | 104.6 | 103.9 | 143.6 |
| 1600 | 94.7 | 95.1 | 93.5 | 93.2 | 94.7 | 94.4 | 97.1 | 104.7 | 107.5 | 107.9 | 102.8 | 102.9 | 102.9 | 143.7 |
| 2000 | 96.8 | 94.1 | 93.7 | 92.9 | 93.0 | 94.5 | 94.2 | 97.6 | 105.3 | 107.7 | 108.2 | 103.4 | 104.5 | 144.1 |
| 2500 | 102.8 | 101.2 | 99.0 | 95.3 | 96.7 | 96.5 | 96.3 | 98.4 | 106.7 | 107.5 | 108.3 | 106.1 | 105.7 | 145.3 |
| 3150 | 104.9 | 103.7 | 102.8 | 100.3 | 100.1 | 99.2 | 97.5 | 99.3 | 106.0 | 107.5 | 107.5 | 104.1 | 105.1 | 145.9 |
| 4000 | 109.6 | 108.0 | 105.1 | 102.0 | 101.6 | 100.8 | 98.7 | 99.7 | 106.6 | 107.0 | 106.3 | 103.7 | 104.7 | 147.3 |
| 5000 | 108.5 | 107.3 | 108.0 | 104.9 | 105.1 | 103.4 | 100.0 | 100.6 | 107.2 | 107.2 | 106.8 | 104.4 | 106.3 | 148.3 |
| 6300 | 106.2 | 105.3 | 106.0 | 106.6 | 104.8 | 105.7 | 102.1 | 101.6 | 106.8 | 106.7 | 105.6 | 103.3 | 105.8 | 148.1 |
| 8000 | 106.2 | 106.3 | 105.3 | 104.1 | 103.6 | 104.2 | 102.3 | 102.0 | 106.9 | 106.4 | 104.4 | 104.3 | 105.4 | 148.0 |
| 10000 | 104.9 | 105.1 | 104.9 | 103.8 | 104.6 | 104.5 | 101.2 | 102.7 | 105.3 | 105.3 | 103.3 | 103.0 | 105.2 | 147.9 |
| 12500 | 104.2 | 104.9 | 105.0 | 103.9 | 103.6 | 103.3 | 101.2 | 102.1 | 105.2 | 105.1 | 101.9 | 101.7 | 104.8 | 148.3 |
| 16000 | 102.2 | 103.2 | 103.1 | 102.2 | 103.8 | 104.1 | 100.3 | 101.4 | 100.9 | 99.5 | 96.2 | 97.0 | 101.0 | 147.8 |
| 20000 | 100.4 | 101.5 | 102.3 | 101.9 | 103.8 | 103.4 | 97.7 | 97.2 | 99.3 | 98.2 | 93.5 | 94.5 | 100.3 | 148.3 |
| 25000 | 97.7 | 100.7 | 100.1 | 100.0 | 100.9 | 100.8 | 95.1 | 93.2 | 98.7 | 97.9 | 95.3 | 93.8 | 98.0 | 148.7 |
| 31500 | 95.7 | 95.7 | 95.7 | 95.1 | 95.2 | 95.2 | 92.5 | 92.1 | 91.6 | 90.1 | 88.0 | 87.0 | 91.6 | 147.2 |
| 40000 | 90.0 | 88.8 | 91.7 | 92.6 | 93.9 | 93.1 | 86.1 | 85.3 | 88.6 | 83.6 | 82.5 | 82.0 | 86.6 | 147.2 |
| 50000 | 87.3 | 86.0 | 87.6 | 87.5 | 85.9 | 85.7 | 81.7 | 78.4 | 86.4 | 79.3 | 74.1 | 75.5 | 83.2 | 146.5 |
| 63000 | 78.7 | 78.7 | 79.0 | 80.2 | 76.7 | 76.9 | 76.4 | 73.4 | 81.4 | 75.1 | 75.7 | 73.3 | 78.6 | 144.7 |
| 80000 | 68.7 | 68.3 | 69.6 | 70.8 | 70.3 | 71.0 | 69.0 | 67.7 | 71.6 | 65.3 | 65.9 | 63.5 | 68.8 | 142.9 |
| GASPL | 116.1 | 115.5 | 115.1 | 113.8 | 113.9 | 113.6 | 110.9 | 111.8 | 117.4 | 118.9 | 120.1 | 118.8 | 117.9 | 160.3 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 386.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | 3859 | TAMB | 29.30 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH997 | PAMB | 29.5600 | RELHUM | 43.00 |

| MODEL | TEST POINT | ACUSTIC RANGE | 12.2 M (40.0 FT) | ARC | 154.7 SQ CM (23.99 SQ IN) | MODEL | 117.85 M/SEC (386.0 FPS) |
|-------|------------|---------------|-------------------|-----|----------------------------|-------|---------------------------|
| 7500 | 7502 | | | | | | |

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FM0DL X75021

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 66.7 | 67.6 | 68.5 | 68.1 | 69.1 | 70.4 | 69.8 | 71.0 | 78.0 | 84.6 | 87.3 | 86.7 | 78.9 | 161.6 |
| 63 | 67.7 | 68.5 | 69.6 | 69.0 | 70.0 | 71.5 | 71.2 | 72.0 | 80.0 | 84.9 | 87.3 | 86.8 | 77.7 | 161.4 |
| 80 | 68.6 | 69.2 | 70.6 | 70.3 | 74.5 | 72.5 | 72.0 | 74.2 | 82.4 | 86.1 | 88.6 | 85.1 | 77.3 | 162.1 |
| 100 | 70.0 | 70.6 | 71.1 | 71.4 | 72.8 | 73.8 | 73.7 | 75.8 | 83.5 | 86.8 | 87.5 | 83.0 | 77.7 | 161.7 |
| 125 | 71.7 | 70.5 | 72.8 | 72.6 | 72.9 | 75.0 | 74.9 | 76.2 | 83.5 | 86.0 | 87.4 | 80.8 | 76.2 | 161.3 |
| 160 | 72.1 | 71.5 | 73.7 | 72.6 | 74.6 | 76.1 | 75.2 | 77.5 | 84.7 | 86.2 | 86.4 | 80.0 | 75.6 | 161.3 |
| 200 | 72.2 | 74.2 | 75.4 | 74.5 | 74.7 | 76.3 | 75.9 | 78.2 | 83.0 | 86.7 | 85.5 | 77.9 | 74.2 | 161.4 |
| 250 | 74.0 | 73.0 | 73.7 | 73.8 | 74.3 | 76.0 | 75.5 | 78.5 | 85.4 | 86.6 | 85.4 | 78.1 | 75.1 | 161.7 |
| 315 | 79.5 | 79.8 | 78.8 | 75.8 | 77.7 | 77.7 | 77.3 | 79.0 | 86.5 | 86.1 | 85.1 | 79.2 | 75.5 | 162.9 |
| 400 | 81.2 | 81.8 | 82.3 | 80.5 | 80.6 | 80.1 | 78.3 | 78.5 | 85.9 | 85.7 | 83.7 | 77.6 | 73.9 | 163.6 |
| 500 | 85.4 | 85.7 | 84.2 | 81.9 | 82.1 | 81.2 | 79.1 | 79.6 | 85.6 | 84.7 | 82.1 | 76.5 | 72.6 | 164.9 |
| 630 | 83.8 | 84.7 | 86.7 | 84.5 | 85.3 | 83.7 | 80.2 | 80.5 | 85.9 | 84.5 | 82.1 | 76.5 | 73.1 | 166.0 |
| 800 | 81.0 | 82.3 | 84.5 | 86.0 | 84.7 | 85.8 | 82.0 | 81.0 | 85.2 | 83.7 | 80.3 | 74.7 | 71.5 | 165.7 |
| 1000 | 86.6 | 83.0 | 83.3 | 83.3 | 84.2 | 84.2 | 82.1 | 81.2 | 85.1 | 83.1 | 78.8 | 75.0 | 69.9 | 165.6 |
| 1250 | 78.8 | 81.4 | 82.9 | 82.9 | 84.2 | 84.3 | 80.8 | 81.7 | 83.3 | 81.6 | 77.2 | 73.0 | 68.3 | 165.6 |
| 1600 | 77.1 | 80.6 | 82.6 | 82.6 | 83.0 | 82.9 | 80.5 | 80.8 | 82.8 | 80.9 | 74.9 | 70.3 | 65.5 | 165.9 |
| 2000 | 74.2 | 76.4 | 80.3 | 80.7 | 83.0 | 83.5 | 78.5 | 79.9 | 78.1 | 74.7 | 68.2 | 64.0 | 53.6 | 165.4 |
| 2500 | 70.6 | 75.5 | 78.6 | 79.7 | 82.4 | 82.3 | 76.4 | 76.0 | 75.6 | 70.1 | 63.7 | 58.7 | 53.1 | 166.0 |
| 3150 | 64.6 | 72.2 | 74.5 | 76.2 | 78.2 | 78.4 | 72.4 | 69.5 | 73.1 | 69.4 | 62.1 | 53.0 | 42.3 | 166.4 |
| 4000 | 56.4 | 62.5 | 67.5 | 69.7 | 69.4 | 69.9 | 66.8 | 65.1 | 62.2 | 56.9 | 48.7 | 37.2 | 21.5 | 164.8 |
| 5000 | 40.9 | 48.0 | 56.0 | 60.1 | 63.2 | 62.9 | 55.5 | 52.8 | 52.9 | 43.0 | 33.4 | 18.6 | | 164.9 |
| 6300 | 20.4 | 31.0 | 39.9 | 44.4 | 45.1 | 45.6 | 40.9 | 35.2 | 38.7 | 24.3 | 12.1 | | | 164.2 |
| 8000 | | | 10.0 | 17.8 | 17.8 | 19.1 | 17.5 | 11.0 | 12.4 | | | | | 162.4 |
| 10000 | | | | | | | | | | | | | | 160.5 |

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GASPL 91.2 92.5 93.5 92.9 93.6 93.7 90.9 91.4 96.5 97.3 97.2 93.1 87.2 177.9
 PNL 98.0 99.9 101.7 102.1 103.8 103.9 100.1 100.4 103.4 102.4 100.0 94.5 89.6
 PNLT 98.0 99.9 102.5 102.7 105.1 105.0 100.1 100.4 104.1 103.7 101.3 95.6 90.6

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 29.30
 LOCATION C41 ANECH CH AERO. RDG. ADH997 PAMB 29.5600 RELHUM 43.00

MODEL 7500 TEST POINT 7502 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.65 M/SEC (386.0 FPS) FREE-JET SPEED

09/30/79 19.452

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
50.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X75030
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. **PH**

FREQ
50
63
80
100
125
160
200

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 82.0 | 86.8 | 85.6 | 86.4 | 87.2 | 89.1 | 91.0 | 92.9 | 97.6 | 102.1 | 106.5 | 109.5 | 109.1 | 142.9 |
| 315 | 23.4 | 86.2 | 86.2 | 87.2 | 86.8 | 90.9 | 91.3 | 94.0 | 99.9 | 104.0 | 108.1 | 111.3 | 110.5 | 144.6 |
| 400 | 85.7 | 87.7 | 87.7 | 87.2 | 89.1 | 91.2 | 92.1 | 94.5 | 101.0 | 107.6 | 109.9 | 112.6 | 110.5 | 146.1 |
| 500 | 85.7 | 88.9 | 89.0 | 88.8 | 90.2 | 92.5 | 93.7 | 95.8 | 102.3 | 108.1 | 111.0 | 112.4 | 110.6 | 143.5 |
| 630 | 87.1 | 89.9 | 89.9 | 89.9 | 94.3 | 93.4 | 94.5 | 97.7 | 103.7 | 108.2 | 110.9 | 112.8 | 111.2 | 146.8 |
| 800 | 89.6 | 90.2 | 90.9 | 91.7 | 92.6 | 94.9 | 95.6 | 98.7 | 105.2 | 108.5 | 109.9 | 112.3 | 111.2 | 146.7 |
| 1000 | 92.0 | 92.5 | 92.8 | 92.1 | 92.9 | 95.8 | 96.7 | 99.6 | 106.0 | 108.4 | 108.2 | 111.2 | 110.8 | 146.2 |
| 1250 | 90.1 | 93.4 | 92.9 | 93.4 | 94.5 | 97.1 | 97.0 | 100.4 | 106.6 | 107.7 | 109.1 | 112.0 | 110.7 | 146.6 |
| 1600 | 91.7 | 91.8 | 92.6 | 93.3 | 94.7 | 96.8 | 97.7 | 101.3 | 107.0 | 107.7 | 108.9 | 112.1 | 110.8 | 146.7 |
| 2000 | 92.1 | 93.9 | 93.4 | 93.5 | 94.0 | 96.1 | 97.3 | 101.0 | 107.3 | 108.3 | 108.5 | 111.7 | 108.9 | 146.4 |
| 2500 | 91.6 | 93.1 | 93.4 | 93.4 | 94.7 | 96.8 | 98.5 | 101.8 | 107.0 | 108.7 | 108.7 | 110.8 | 107.6 | 146.3 |
| 3150 | 92.3 | 93.9 | 93.2 | 93.9 | 94.5 | 97.6 | 98.7 | 102.2 | 107.1 | 107.1 | 108.7 | 109.9 | 105.6 | 145.8 |
| 4000 | 91.9 | 92.8 | 93.0 | 93.0 | 94.6 | 96.9 | 98.1 | 102.0 | 106.2 | 106.2 | 107.8 | 107.7 | 104.0 | 144.8 |
| 5000 | 90.8 | 91.9 | 92.4 | 92.9 | 94.7 | 96.8 | 97.9 | 101.6 | 105.8 | 105.6 | 106.9 | 106.1 | 103.1 | 144.3 |
| 6300 | 89.3 | 91.6 | 91.7 | 92.4 | 94.1 | 97.0 | 97.4 | 100.9 | 105.1 | 104.8 | 105.3 | 105.4 | 102.8 | 143.6 |
| 8000 | 88.6 | 90.8 | 90.9 | 92.0 | 93.6 | 96.2 | 97.0 | 99.6 | 103.8 | 103.4 | 104.2 | 104.4 | 101.9 | 142.9 |
| 10000 | 86.5 | 89.9 | 90.5 | 91.1 | 93.3 | 96.2 | 96.0 | 99.1 | 102.7 | 102.2 | 102.4 | 103.4 | 100.1 | 142.3 |
| 12500 | 83.3 | 88.2 | 88.6 | 90.0 | 92.3 | 94.4 | 94.4 | 97.2 | 100.1 | 99.9 | 100.6 | 100.6 | 98.9 | 141.0 |
| 16000 | 81.1 | 86.6 | 87.9 | 88.5 | 91.9 | 93.7 | 93.1 | 95.5 | 97.6 | 98.4 | 98.8 | 99.0 | 97.3 | 140.8 |
| 20000 | 76.6 | 83.9 | 84.9 | 86.8 | 90.3 | 92.2 | 89.8 | 92.4 | 94.5 | 95.0 | 95.2 | 95.7 | 93.9 | 139.5 |
| 25000 | 75.6 | 80.2 | 83.0 | 83.3 | 88.2 | 89.1 | 87.6 | 87.4 | 92.0 | 90.3 | 90.9 | 92.1 | 92.2 | 138.5 |
| 31500 | 73.9 | 77.2 | 80.2 | 82.8 | 83.6 | 84.2 | 83.6 | 84.1 | 87.3 | 89.0 | 87.9 | 88.6 | 85.7 | 137.9 |
| 40000 | 69.4 | 73.2 | 76.9 | 78.1 | 82.9 | 83.1 | 80.2 | 79.4 | 82.4 | 83.6 | 82.8 | 82.1 | 81.3 | 138.1 |
| 50000 | 63.7 | 67.3 | 70.2 | 73.5 | 78.2 | 78.2 | 78.4 | 75.3 | 78.8 | 77.5 | 76.6 | 76.9 | 75.3 | 137.6 |
| 63000 | 57.7 | 60.3 | 63.7 | 66.1 | 67.4 | 69.1 | 73.8 | 69.7 | 74.8 | 70.5 | 70.6 | 72.1 | 69.4 | 136.7 |
| 80000 | 51.9 | 52.9 | 57.2 | 61.1 | 61.8 | 62.3 | 64.2 | 64.2 | 68.1 | 64.6 | 65.8 | 64.8 | 61.5 | 137.0 |

GASPL 102.2 104.0 104.2 104.6 108.2 108.5 109.5 112.4 117.5 119.3 120.8 122.9 121.2 153.3

TEST DATE 02-21-78 TAPE NO. N294 IALPHA 8859 TAPB 24.80
LOCATION C41 ANECH CH AERO. RDG. ADH096 PAMP 29.3600 RELHUM 39.00

MODEL TEST POINT 7503 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED 0. FPS

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X75030

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 82.0 | 86.8 | 85.6 | 86.4 | 87.2 | 89.1 | 91.0 | 92.9 | 97.6 | 102.1 | 106.5 | 109.5 | 109.1 | 142.9 |
| 315 | 83.4 | 88.2 | 86.2 | 87.2 | 88.8 | 90.9 | 91.3 | 94.0 | 99.9 | 104.0 | 108.1 | 111.3 | 110.5 | 144.6 |
| 400 | 86.7 | 87.7 | 87.2 | 89.1 | 91.2 | 92.1 | 94.5 | 101.0 | 107.8 | 109.9 | 112.6 | 110.5 | 146.1 | |
| 500 | 85.7 | 88.3 | 89.0 | 88.8 | 90.2 | 92.5 | 93.7 | 95.8 | 102.3 | 108.1 | 111.0 | 112.4 | 110.6 | 146.5 |
| 630 | 87.1 | 89.9 | 89.9 | 89.9 | 94.3 | 93.4 | 94.5 | 97.7 | 103.7 | 109.2 | 110.9 | 112.8 | 111.2 | 146.8 |
| 800 | 89.6 | 90.2 | 90.9 | 91.7 | 92.6 | 94.9 | 95.6 | 98.7 | 105.2 | 108.5 | 109.9 | 112.3 | 111.2 | 146.7 |
| 1000 | 92.0 | 92.5 | 92.8 | 92.1 | 92.9 | 95.8 | 96.7 | 99.6 | 106.0 | 108.4 | 108.2 | 111.2 | 110.8 | 146.2 |
| 1250 | 90.1 | 93.4 | 92.9 | 93.4 | 94.5 | 97.1 | 97.0 | 100.4 | 106.6 | 107.7 | 109.1 | 112.0 | 110.7 | 146.8 |
| 1600 | 91.7 | 91.8 | 92.6 | 93.3 | 94.7 | 96.8 | 97.7 | 101.3 | 107.0 | 107.7 | 108.9 | 112.1 | 110.8 | 146.7 |
| 2000 | 92.1 | 93.9 | 93.4 | 93.5 | 94.0 | 96.1 | 97.3 | 101.0 | 107.3 | 108.3 | 108.5 | 111.7 | 108.9 | 146.4 |
| 2500 | 91.5 | 93.1 | 93.4 | 93.4 | 94.7 | 96.8 | 98.5 | 101.6 | 107.0 | 108.7 | 108.7 | 110.8 | 107.6 | 146.3 |
| 3150 | 92.3 | 93.9 | 93.2 | 93.9 | 94.5 | 97.6 | 98.7 | 102.2 | 107.1 | 107.1 | 108.7 | 109.9 | 105.6 | 145.8 |
| 4000 | 91.9 | 92.8 | 93.0 | 93.0 | 94.6 | 96.9 | 98.1 | 102.1 | 106.2 | 106.2 | 107.8 | 107.7 | 104.0 | 141.8 |
| 5000 | 90.8 | 91.9 | 92.4 | 92.9 | 94.7 | 96.8 | 97.9 | 101.6 | 105.8 | 105.8 | 106.9 | 106.1 | 103.1 | 144.3 |
| 6300 | 89.3 | 91.6 | 91.7 | 92.4 | 94.1 | 97.0 | 97.4 | 100.5 | 105.1 | 104.8 | 105.3 | 105.4 | 102.8 | 143.6 |
| 8000 | 85.3 | 90.8 | 90.9 | 92.0 | 93.6 | 96.2 | 97.0 | 99.6 | 103.8 | 103.4 | 104.2 | 104.4 | 101.9 | 142.9 |
| 10000 | 86.5 | 89.9 | 90.5 | 91.1 | 93.5 | 96.2 | 96.0 | 99.1 | 102.7 | 102.2 | 102.4 | 103.4 | 100.1 | 142.3 |
| 12500 | 83.3 | 88.2 | 88.6 | 90.0 | 92.3 | 94.4 | 94.4 | 97.2 | 100.1 | 99.9 | 100.6 | 100.6 | 98.9 | 141.0 |
| 16000 | 81.1 | 86.6 | 87.9 | 88.5 | 91.9 | 93.7 | 93.1 | 95.5 | 97.6 | 98.4 | 98.8 | 99.0 | 97.3 | 140.8 |
| 20000 | 76.6 | 83.9 | 84.9 | 86.8 | 90.3 | 92.2 | 89.8 | 92.4 | 94.5 | 95.0 | 95.2 | 95.7 | 93.9 | 139.5 |
| 25000 | 75.6 | 80.2 | 83.0 | 83.3 | 88.2 | 89.1 | 87.6 | 87.4 | 92.0 | 90.3 | 90.9 | 92.1 | 92.2 | 138.5 |
| 31500 | 73.9 | 77.2 | 80.2 | 82.8 | 83.6 | 84.2 | 83.6 | 84.1 | 87.3 | 89.0 | 87.9 | 86.6 | 85.7 | 137.9 |
| 40000 | 69.4 | 73.2 | 76.9 | 78.1 | 82.9 | 83.1 | 80.2 | 79.4 | 82.4 | 83.6 | 82.8 | 82.1 | 81.3 | 138.1 |
| 50000 | 53.7 | 67.3 | 70.2 | 73.5 | 76.2 | 78.2 | 78.4 | 75.3 | 78.8 | 77.5 | 76.6 | 76.9 | 75.3 | 137.6 |
| 63000 | 57.7 | 60.3 | 63.7 | 66.1 | 67.4 | 69.1 | 72.6 | 69.7 | 74.8 | 70.5 | 70.5 | 72.1 | 69.4 | 136.7 |
| 80000 | 51.9 | 52.9 | 57.2 | 61.1 | 61.8 | 62.3 | 64.3 | 64.2 | 68.1 | 64.6 | 65.8 | 64.8 | 61.5 | 137.0 |

GASPL 102.2 104.0 104.2 104.6 106.2 108.5 109.2 112.4 119.3 120.8 122.9 121.2 158.3

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000
FREE JET VELOCITY (FT/SEC) 0.
FREE JET DIAMETER (IN) 48.00
REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

TEST DATE 02-21-78 TAPE NO. N294 ALPHA 8859 TAMB 24.80
LOCATION C41 ANECH CH AERO. RDG. ADH096 PAMB 29.3600 RELHUM 39.00

MODEL TEST POINT 7500
ACQUSTIC RANGE 12.2 M (40.0 FT) ARC
SIZE 154.7 SQ CH (23.99 SQ IN) - MODEL 0.
FREE-JET SPEED 0. M/SEC (0. FPS)

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09/30/79 19.452

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 35 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X75031

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 63.9 | 67.4 | 68.6 | 68.6 | 71.0 | 73.3 | 74.0 | 76.0 | 81.6 | 87.5 | 88.1 | 88.6 | 83.2 | 163.7 |
| 60 | 63.9 | 68.0 | 69.6 | 70.4 | 72.1 | 74.6 | 75.6 | 77.4 | 83.1 | 87.8 | 89.2 | 88.4 | 83.2 | 164.1 |
| 80 | 65.2 | 69.6 | 70.7 | 71.4 | 76.2 | 75.4 | 76.4 | 79.2 | 84.4 | 87.9 | 89.0 | 88.7 | 83.7 | 164.5 |
| 100 | 67.7 | 69.6 | 71.7 | 73.2 | 74.4 | 76.9 | 77.4 | 80.2 | 85.9 | 88.1 | 87.9 | 88.1 | 83.6 | 164.3 |
| 125 | 69.9 | 72.0 | 73.4 | 73.4 | 74.7 | 77.7 | 78.4 | 80.9 | 86.7 | 87.9 | 86.2 | 86.6 | 83.0 | 163.6 |
| 160 | 67.8 | 72.6 | 73.4 | 74.7 | 76.2 | 78.9 | 78.7 | 81.7 | 87.1 | 87.1 | 86.9 | 87.4 | 82.5 | 164.2 |
| 200 | 69.2 | 71.0 | 72.9 | 74.4 | 76.2 | 78.4 | 79.2 | 82.4 | 87.3 | 86.8 | 86.4 | 87.2 | 82.1 | 164.3 |
| 250 | 69.3 | 72.6 | 73.5 | 74.3 | 75.3 | 77.6 | 78.6 | 81.6 | 87.4 | 87.2 | 85.7 | 86.3 | 79.6 | 164.1 |
| 315 | 66.3 | 71.7 | 73.1 | 74.0 | 75.7 | 78.0 | 79.5 | 82.2 | 86.5 | 87.3 | 85.4 | 85.0 | 77.4 | 163.9 |
| 400 | 66.6 | 72.0 | 72.6 | 74.2 | 75.2 | 78.5 | 79.5 | 82.4 | 86.5 | 85.2 | 85.0 | 83.3 | 74.5 | 163.4 |
| 500 | 67.7 | 70.5 | 72.1 | 73.0 | 75.0 | 77.6 | 78.5 | 82.0 | 85.3 | 83.9 | 83.6 | 80.5 | 71.8 | 162.4 |
| 630 | 66.1 | 69.2 | 71.2 | 72.5 | 74.9 | 77.1 | 78.1 | 81.3 | 84.6 | 83.2 | 82.2 | 78.2 | 69.9 | 161.9 |
| 800 | 64.1 | 66.6 | 70.1 | 71.6 | 74.1 | 77.1 | 77.4 | 80.3 | 83.5 | 81.6 | 80.1 | 76.8 | 68.5 | 161.3 |
| 1000 | 63.0 | 67.5 | 69.1 | 71.2 | 73.4 | 76.2 | 76.8 | 78.6 | 82.0 | 80.1 | 78.6 | 75.2 | 66.4 | 160.6 |
| 1250 | 60.4 | 66.2 | 68.5 | 70.2 | 73.2 | 76.0 | 75.7 | 78.2 | 80.7 | 78.5 | 76.2 | 73.4 | 63.1 | 160.0 |
| 1600 | 56.3 | 63.9 | 66.2 | 68.7 | 71.6 | 74.0 | 73.7 | 75.6 | 77.7 | 75.6 | 73.6 | 69.2 | 59.6 | 156.7 |
| 2000 | 53.1 | 61.7 | 65.1 | 67.0 | 71.1 | 73.1 | 72.3 | 74.0 | 74.8 | 73.5 | 70.8 | 66.0 | 54.9 | 156.4 |
| 2500 | 46.8 | 57.8 | 61.2 | 64.6 | 69.0 | 71.1 | 68.5 | 70.2 | 70.8 | 68.9 | 65.4 | 59.8 | 46.7 | 157.2 |
| 3150 | 42.5 | 51.7 | 57.4 | 59.8 | 65.5 | 66.7 | 64.9 | 63.6 | 56.4 | 61.8 | 57.7 | 51.2 | 36.6 | 155.2 |
| 4000 | 34.5 | 44.0 | 50.8 | 55.8 | 57.9 | 58.9 | 57.9 | 57.1 | 57.9 | 55.8 | 48.5 | 36.9 | 15.6 | 155.6 |
| 5000 | 20.2 | 32.4 | 41.3 | 45.7 | 52.2 | 53.0 | 49.6 | 47.0 | 46.6 | 42.6 | 33.6 | 15.7 | | 155.7 |
| 6300 | | 12.3 | 22.6 | 30.3 | 35.4 | 38.2 | 37.6 | 32.1 | 31.1 | 22.5 | 9.7 | | | 155.2 |
| 8000 | | | | 3.6 | 6.5 | 11.3 | 13.7 | 7.3 | 3.6 | | | | | 154.4 |
| 10000 | | | | | | | | | | | | | | 154.7 |

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|-------|------|------|------|------|------|------|------|------|-------|-------|-------|------|------|-------|
| GASPL | 76.9 | 82.3 | 83.7 | 84.6 | 86.9 | 89.2 | 89.6 | 92.6 | 97.2 | 98.0 | 97.7 | 97.5 | 92.1 | 175.6 |
| PWL | 62.7 | 67.2 | 69.1 | 90.9 | 94.0 | 96.3 | 96.1 | 98.4 | 102.2 | 101.6 | 100.6 | 99.2 | 92.5 | |
| PNLT | 62.7 | 67.2 | 90.1 | 91.5 | 95.3 | 96.9 | 96.7 | 98.9 | 102.7 | 101.6 | 101.6 | 99.2 | 93.7 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-21-78 TAPE NO. N294 ALPHA 3859 TAMP 24.80
 LOCATION C41 ANECH CH AERO. RDG. ADH096 PAMP 29.3600 RELHUR 39.00

MODEL TEST POINT 7503 ACUSTIC RANGE 731.5 M (2400.0 FT) SL S032.2 SQ CM (1400.00 SQ IN) - FULL SIZE FREE-JET SPEED
 7500 0. M/SEC (0. FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X75040
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50
63
80

100
125
160
200

250 77.3 79.8 79.8 31.3 81.9 83.9 85.9 87.9 92.9 97.6 102.3 105.5 104.6 138.6
315 79.8 80.8 81.3 82.0 82.7 85.4 86.0 86.0 86.0 86.1 103.0 105.2 106.6 101.0 140.7
400 81.0 82.0 82.5 83.6 85.5 87.4 87.7 90.2 97.5 103.8 107.0 105.7 97.3 140.9
500 81.3 81.8 82.7 83.6 85.5 87.4 87.7 90.2 97.5 103.8 107.0 105.7 97.3 140.9
630 82.0 83.2 84.5 84.3 91.7 88.5 89.7 92.9 99.4 104.5 106.8 103.3 93.4 140.8
800 84.3 83.6 85.6 86.4 86.9 89.6 91.0 93.9 101.2 105.5 105.9 100.8 91.9 140.8
1000 84.9 83.7 86.5 86.2 87.6 90.4 92.3 93.0 102.8 105.3 104.5 97.1 89.0 140.5
1250 84.3 85.8 87.6 87.4 88.7 91.8 92.7 96.1 102.5 105.0 104.6 95.7 88.1 140.4
1600 86.1 85.0 87.0 87.8 89.6 92.5 93.6 97.1 103.4 104.9 103.2 94.5 87.6 140.5
2000 84.6 84.8 86.9 87.4 88.7 91.1 93.0 97.1 103.5 105.0 102.2 93.6 87.6 140.2
2500 84.5 85.8 87.0 87.8 89.9 92.2 94.9 97.8 103.5 105.2 101.9 93.8 87.0 140.4
3150 85.1 85.9 87.4 88.4 89.9 92.8 94.7 98.4 103.8 103.3 100.5 93.9 87.1 140.0
4000 85.2 85.5 87.8 88.0 89.3 92.2 94.1 98.3 103.2 103.0 100.6 93.5 86.5 139.6
5000 85.9 85.5 87.3 88.0 89.5 92.6 95.0 98.2 102.7 103.5 100.5 93.4 86.4 139.8
6300 84.7 85.6 87.4 88.1 89.3 93.4 93.9 97.6 102.3 102.3 99.8 93.1 86.5 139.4
8000 85.2 86.1 87.0 87.3 89.6 92.7 93.8 96.9 101.4 100.8 98.8 92.7 86.7 138.8
10000 84.1 85.5 87.2 87.0 89.6 92.5 92.6 96.7 100.3 99.9 97.8 93.0 86.6 138.6
12500 83.2 85.2 85.8 86.1 88.7 91.0 91.8 94.4 97.3 97.9 95.5 91.5 86.2 137.3
16000 82.0 84.3 85.4 86.5 88.9 90.8 90.1 93.2 95.7 97.0 93.8 90.5 85.9 137.6
20000 77.5 82.5 82.7 84.0 88.0 89.9 87.5 89.9 92.3 93.4 90.5 87.7 84.1 136.4
25000 77.6 79.3 81.3 81.3 85.4 87.3 84.4 84.6 89.5 88.4 86.2 84.1 82.2 135.3
31500 76.1 76.3 79.8 80.9 81.2 81.7 81.3 82.1 85.3 86.2 83.4 79.1 76.4 135.1
40000 72.9 72.8 76.0 77.2 80.7 81.6 76.9 77.5 80.2 80.0 78.1 73.4 71.6 135.4
50000 66.5 66.9 70.1 72.8 75.5 77.2 74.6 72.9 77.1 72.7 71.7 68.4 65.0 135.2
63000 60.2 59.9 62.8 65.4 66.7 68.9 70.4 68.3 74.4 67.2 65.4 63.1 60.2 135.0
80000 53.2 52.5 55.3 58.4 57.1 60.0 59.3 59.8 64.7 59.5 59.4 54.3 52.2 132.8

QASPL 96.9 97.6 99.1 99.6 101.8 104.2 105.3 108.7 114.1 116.0 116.0 113.6 109.2 153.1

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TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 29.84
LOCATION C41 ANECH CH AERO. RDG. ADH998 PANS 29.5600 RELHUM 42.70

MODEL TEST POINT 7500 7504 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 184.7 SQ CM (29.99 SQ IN) - MODEL 117.65 M/SEC (388.0 FPS) FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X75040

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 386.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 5859 TAMB 29.84
LOCATION C41 ANECH CH AERO. RDG. ADH988 PAMB 29.5600 RELHUM 42.70

MODEL TEST POINT 7504 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.65 M/SEC (386.0 FPS)
FREE-JET SPEED

66

65

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X75041

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 64.8 | 66.3 | 68.6 | 66.6 | 67.2 | 68.6 | 68.1 | 68.9 | 76.1 | 81.0 | 82.7 | 80.7 | 72.6 | 156.8 |
| 63 | 65.7 | 67.3 | 67.6 | 67.1 | 69.3 | 69.7 | 68.7 | 69.6 | 77.9 | 81.5 | 82.5 | 78.7 | 70.3 | 155.5 |
| 80 | 66.8 | 67.7 | 68.3 | 68.5 | 76.0 | 70.9 | 70.5 | 72.0 | 80.0 | 82.9 | 82.0 | 77.8 | 71.2 | 157.1 |
| 100 | 70.1 | 71.2 | 71.7 | 70.2 | 70.8 | 72.0 | 71.9 | 73.1 | 81.3 | 82.9 | 80.8 | 74.2 | 71.4 | 156.9 |
| 125 | 69.6 | 69.3 | 71.1 | 71.1 | 71.4 | 73.0 | 73.2 | 74.1 | 81.7 | 82.6 | 81.0 | 72.8 | 68.4 | 156.8 |
| 160 | 70.0 | 69.3 | 71.9 | 71.0 | 72.5 | 74.4 | 73.6 | 75.3 | 82.7 | 82.6 | 80.1 | 71.8 | 68.0 | 157.1 |
| 200 | 69.1 | 71.2 | 72.9 | 72.0 | 73.5 | 75.1 | 74.6 | 76.5 | 82.9 | 82.6 | 78.7 | 70.7 | 67.7 | 157.4 |
| 250 | 70.7 | 70.1 | 72.1 | 72.3 | 72.5 | 73.7 | 74.0 | 76.4 | 83.0 | 83.1 | 78.5 | 70.9 | 66.9 | 157.7 |
| 315 | 68.7 | 69.7 | 71.8 | 71.8 | 73.7 | 74.9 | 76.0 | 77.2 | 83.5 | 81.4 | 77.7 | 71.0 | 66.7 | 157.6 |
| 400 | 68.1 | 70.3 | 71.7 | 72.1 | 73.8 | 75.6 | 76.0 | 77.9 | 83.2 | 81.3 | 77.5 | 70.4 | 65.5 | 158.1 |
| 500 | 68.1 | 70.0 | 71.8 | 72.5 | 73.3 | 75.2 | 75.7 | 78.1 | 82.6 | 81.6 | 77.0 | 69.8 | 64.5 | 158.4 |
| 630 | 67.7 | 69.3 | 72.0 | 72.1 | 73.7 | 76.0 | 76.8 | 78.1 | 82.0 | 80.1 | 76.9 | 69.9 | 63.6 | 159.3 |
| 800 | 67.6 | 68.9 | 71.4 | 72.1 | 73.8 | 76.5 | 76.4 | 77.2 | 81.1 | 78.7 | 74.8 | 68.4 | 63.9 | 159.1 |
| 1000 | 68.7 | 70.8 | 72.8 | 73.0 | 73.9 | 75.7 | 75.4 | 76.5 | 80.3 | 77.9 | 74.0 | 68.9 | 63.6 | 159.4 |
| 1250 | 68.5 | 70.8 | 71.9 | 71.8 | 73.8 | 75.3 | 74.3 | 76.3 | 77.8 | 76.5 | 72.3 | 67.7 | 62.7 | 159.1 |
| 1600 | 68.3 | 69.3 | 71.5 | 71.0 | 72.0 | 73.6 | 73.3 | 74.1 | 76.7 | 76.0 | 70.7 | 66.2 | 60.8 | 159.3 |
| 2000 | 61.3 | 65.7 | 67.6 | 68.2 | 72.6 | 73.3 | 71.6 | 73.0 | 73.9 | 72.6 | 66.8 | 61.8 | 55.7 | 157.6 |
| 2500 | 60.5 | 65.4 | 67.5 | 68.6 | 71.2 | 71.8 | 68.6 | 69.5 | 68.9 | 64.9 | 59.2 | 54.0 | 47.4 | 156.8 |
| 3150 | 52.1 | 60.5 | 62.3 | 64.0 | 67.2 | 67.9 | 63.1 | 61.0 | 65.6 | 63.3 | 56.4 | 47.4 | 36.8 | 156.8 |
| 4000 | 45.1 | 51.8 | 56.3 | 57.2 | 59.4 | 59.4 | 58.1 | 56.8 | 56.5 | 52.0 | 44.2 | 31.8 | 16.3 | 155.5 |
| 5000 | 30.4 | 38.3 | 46.1 | 49.4 | 54.5 | 54.5 | 48.0 | 45.8 | 47.9 | 38.2 | 29.2 | 14.3 | | 156.5 |
| 6300 | 11.7 | 22.3 | 31.5 | 35.6 | 39.2 | 40.2 | 35.7 | 30.6 | 35.3 | 20.8 | 7.6 | | | 157.9 |
| 8000 | | | | | | | | | | | | | | 156.3 |
| 10000 | | | | | | | | | | | | | | 153.8 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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OASPL 80.6 82.0 83.7 83.6 85.5 86.7 86.5 88.1 93.5 93.4 91.2 86.0 79.8 171.1

PNL 86.7 89.4 91.5 92.1 94.4 95.4 94.0 95.2 99.1 98.0 94.0 87.7 82.1

PNLT 86.7 89.4 92.3 92.7 95.5 96.4 94.6 95.2 100.1 99.1 96.1 88.6 83.2

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMS 29.84
 LOCATION C41 ANECH CH AERG. RDG. ADH988 PAMB 29.5600 RELHUM 42.70

MODEL TEST POINT 7504 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.65 M/SEC (386.0 FPS) FREE-JET SPEED

08/30/79 19.482

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X75050
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

| | | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 75.8 | 79.8 | 78.6 | 79.1 | 79.7 | 82.1 | 83.7 | 85.1 | 89.8 | 92.4 | 96.0 | 99.0 | 99.0 | 99.1 | 132.9 |
| 315 | 78.9 | 79.9 | 80.2 | 80.5 | 81.8 | 83.2 | 83.8 | 85.7 | 91.4 | 93.7 | 96.6 | 99.3 | 98.6 | 98.5 | 133.4 |
| 400 | 77.9 | 80.7 | 81.2 | 81.2 | 82.1 | 84.0 | 84.8 | 88.5 | 92.5 | 96.3 | 97.4 | 98.6 | 98.6 | 98.6 | 133.7 |
| 500 | 78.5 | 81.5 | 82.8 | 81.8 | 83.2 | 85.3 | 85.9 | 87.6 | 93.3 | 96.4 | 97.7 | 97.7 | 97.7 | 95.6 | 133.7 |
| 630 | 78.8 | 83.1 | 82.4 | 82.9 | 83.8 | 86.1 | 86.8 | 88.9 | 94.1 | 98.2 | 97.6 | 96.5 | 93.7 | 93.8 | |
| 800 | 81.1 | 82.7 | 82.9 | 84.5 | 85.1 | 86.7 | 87.6 | 89.7 | 95.7 | 97.3 | 97.1 | 95.8 | 93.0 | 134.0 | |
| 1000 | 82.2 | 83.5 | 84.0 | 83.8 | 84.9 | 87.5 | 88.4 | 90.6 | 96.3 | 96.9 | 96.2 | 94.9 | 92.6 | 133.9 | |
| 1250 | 80.8 | 83.6 | 85.4 | 85.4 | 86.0 | 88.6 | 89.3 | 91.2 | 96.1 | 96.2 | 96.3 | 95.0 | 92.2 | 134.0 | |
| 1600 | 82.9 | 85.3 | 85.3 | 85.6 | 86.2 | 88.5 | 89.7 | 92.1 | 96.7 | 95.9 | 95.9 | 94.3 | 92.3 | 134.1 | |
| 2000 | 81.9 | 86.1 | 85.4 | 85.4 | 85.8 | 87.4 | 88.8 | 91.7 | 96.6 | 95.5 | 94.7 | 93.4 | 91.4 | 133.8 | |
| 2500 | 81.8 | 87.3 | 86.6 | 86.4 | 86.9 | 88.3 | 89.7 | 91.9 | 96.0 | 95.7 | 93.9 | 93.3 | 91.1 | 133.6 | |
| 3150 | 81.3 | 86.4 | 85.7 | 85.2 | 86.2 | 88.8 | 90.0 | 92.2 | 96.1 | 93.8 | 92.7 | 92.4 | 90.1 | 133.1 | |
| 4000 | 80.9 | 85.0 | 85.0 | 85.0 | 85.8 | 88.2 | 89.3 | 91.3 | 94.9 | 92.9 | 91.3 | 90.5 | 88.5 | 132.2 | |
| 5000 | 80.3 | 83.1 | 83.7 | 84.9 | 86.2 | 88.1 | 89.7 | 91.6 | 94.8 | 92.8 | 90.4 | 89.6 | 88.6 | 132.2 | |
| 6300 | 78.8 | 83.9 | 83.9 | 84.7 | 85.4 | 88.3 | 89.0 | 90.7 | 94.3 | 92.1 | 89.4 | 88.6 | 88.1 | 131.8 | |
| 8000 | 77.7 | 82.6 | 83.2 | 84.1 | 85.6 | 87.5 | 88.3 | 90.2 | 93.3 | 91.0 | 88.8 | 88.2 | 87.5 | 131.5 | |
| 10000 | 75.8 | 81.9 | 82.8 | 82.9 | 84.8 | 87.4 | 88.8 | 89.6 | 92.2 | 90.3 | 87.7 | 97.7 | 96.8 | 131.2 | |
| 12500 | 73.9 | 80.3 | 80.7 | 82.0 | 83.6 | 86.0 | 88.9 | 88.0 | 88.9 | 88.5 | 86.1 | 85.9 | 85.7 | 130.3 | |
| 16000 | 71.8 | 78.6 | 80.2 | 81.3 | 83.7 | 85.5 | 83.7 | 86.0 | 88.0 | 88.0 | 84.1 | 84.8 | 84.1 | 130.4 | |
| 20000 | 68.9 | 77.2 | 79.3 | 82.6 | 84.2 | 81.6 | 83.2 | 85.0 | 84.3 | 80.7 | 81.0 | 80.2 | 129.6 | | |
| 25000 | 73.4 | 81.0 | 82.5 | 82.1 | 84.7 | 85.9 | 82.7 | 80.9 | 83.0 | 79.9 | 76.7 | 76.9 | 78.0 | 132.2 | |
| 31500 | 73.0 | 79.3 | 81.8 | 82.7 | 82.0 | 83.0 | 81.4 | 78.9 | 80.1 | 79.1 | 74.2 | 71.4 | 72.0 | 133.5 | |
| 40000 | 60.7 | 65.2 | 69.0 | 70.2 | 74.2 | 74.7 | 70.7 | 71.0 | 72.7 | 72.4 | 68.4 | 65.2 | 66.2 | 128.3 | |
| 50000 | 53.3 | 58.1 | 60.3 | 63.0 | 65.2 | 66.2 | 65.2 | 63.6 | 58.1 | 65.6 | 62.2 | 58.9 | 58.3 | 125.6 | |
| 63000 | 48.7 | 53.4 | 55.3 | 57.6 | 58.0 | 53.7 | 59.9 | 56.5 | 63.4 | 58.1 | 54.6 | 52.4 | 51.7 | 124.8 | |
| 80000 | 41.9 | 45.2 | 48.0 | 50.9 | 49.6 | 51.1 | 50.8 | 50.3 | 55.4 | 50.9 | 48.1 | 43.3 | 42.8 | 123.9 | |
| GASPL | 92.3 | 96.7 | 96.8 | 97.2 | 98.5 | 100.2 | 100.9 | 102.9 | 107.2 | 107.4 | 107.5 | 107.6 | 106.1 | 146.4 | |

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OF POOR QUALITY

TEST DATE 02-21-78 TAPE NO. N294 ALPHA SB59 TAMB 23.00
LOCATION C41 ANECH CH AERO. RDG. ADH089 PAMB 29.3720 RELHUM 45.00

MODEL TEST POINT 7505 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X75050

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 75.6 | 79.8 | 78.6 | 79.1 | 79.7 | 82.1 | 83.7 | 85.1 | 89.8 | 92.4 | 96.0 | 99.0 | 99.1 | 132.9 |
| 315 | 76.9 | 79.9 | 80.2 | 80.5 | 81.8 | 83.2 | 83.6 | 85.7 | 91.4 | 93.7 | 98.6 | 99.3 | 98.5 | 133.4 |
| 400 | 77.9 | 80.7 | 81.2 | 81.2 | 84.0 | 84.8 | 86.5 | 86.5 | 92.5 | 96.3 | 97.4 | 98.6 | 98.8 | 133.7 |
| 500 | 78.5 | 81.5 | 82.8 | 81.8 | 83.2 | 85.3 | 85.9 | 87.6 | 93.3 | 96.4 | 97.7 | 97.7 | 95.6 | 133.7 |
| 630 | 78.8 | 83.1 | 82.4 | 82.9 | 88.8 | 86.1 | 86.8 | 88.9 | 94.1 | 96.2 | 97.6 | 96.5 | 93.7 | 133.8 |
| 800 | 81.1 | 82.7 | 82.9 | 84.5 | 85.1 | 86.7 | 87.6 | 89.7 | 95.7 | 97.3 | 97.1 | 95.8 | 93.0 | 134.0 |
| 1000 | 82.2 | 83.5 | 84.0 | 83.8 | 84.9 | 87.5 | 88.4 | 90.6 | 96.3 | 96.9 | 96.2 | 94.9 | 92.6 | 133.9 |
| 1250 | 80.8 | 85.6 | 85.4 | 85.4 | 86.0 | 88.6 | 89.3 | 91.2 | 96.1 | 96.2 | 96.3 | 95.0 | 92.2 | 134.0 |
| 1600 | 82.9 | 85.3 | 85.3 | 85.6 | 86.2 | 88.5 | 89.7 | 92.1 | 96.7 | 95.9 | 95.9 | 94.3 | 92.3 | 134.1 |
| 2000 | 81.9 | 86.1 | 85.4 | 85.4 | 85.8 | 87.4 | 88.8 | 91.7 | 96.6 | 95.5 | 94.7 | 93.4 | 91.4 | 133.6 |
| 2500 | 81.8 | 87.3 | 86.6 | 86.4 | 86.9 | 88.3 | 89.7 | 91.9 | 96.0 | 95.7 | 93.9 | 93.3 | 91.1 | 133.6 |
| 3150 | 81.3 | 86.4 | 86.2 | 86.2 | 86.2 | 88.8 | 90.0 | 92.2 | 96.1 | 93.8 | 92.7 | 92.4 | 90.1 | 133.1 |
| 4000 | 80.9 | 85.0 | 85.0 | 85.0 | 85.8 | 88.2 | 89.3 | 91.3 | 94.9 | 92.9 | 91.3 | 90.5 | 88.5 | 132.2 |
| 5000 | 80.3 | 83.1 | 83.7 | 84.9 | 86.2 | 88.1 | 89.7 | 91.6 | 94.8 | 92.8 | 90.4 | 89.6 | 88.6 | 132.2 |
| 6300 | 78.8 | 83.4 | 83.9 | 84.7 | 85.4 | 88.3 | 89.0 | 90.7 | 94.3 | 92.1 | 89.4 | 88.6 | 88.1 | 131.8 |
| 8000 | 77.7 | 82.6 | 83.2 | 84.1 | 85.6 | 87.5 | 88.3 | 90.2 | 93.3 | 91.0 | 88.8 | 88.2 | 87.5 | 131.5 |
| 10000 | 75.8 | 81.9 | 82.8 | 82.9 | 84.8 | 87.4 | 88.8 | 89.6 | 92.2 | 90.3 | 87.7 | 87.7 | 86.8 | 131.2 |
| 12500 | 73.9 | 80.3 | 80.7 | 82.0 | 83.6 | 86.0 | 86.9 | 88.0 | 89.9 | 88.5 | 86.1 | 85.9 | 85.7 | 130.3 |
| 16000 | 71.6 | 78.6 | 80.2 | 81.3 | 83.7 | 85.5 | 83.7 | 86.0 | 88.0 | 88.0 | 84.1 | 84.8 | 84.1 | 130.4 |
| 20000 | 68.9 | 77.2 | 77.2 | 79.3 | 82.6 | 84.2 | 81.6 | 83.2 | 85.0 | 84.3 | 80.7 | 81.0 | 80.2 | 129.6 |
| 25000 | 73.4 | 81.0 | 82.5 | 82.1 | 84.7 | 85.9 | 82.7 | 80.9 | 83.0 | 79.9 | 76.7 | 76.9 | 78.0 | 132.2 |
| 31500 | 79.3 | 81.8 | 82.7 | 82.0 | 83.0 | 81.4 | 78.9 | 80.1 | 79.1 | 74.2 | 71.4 | 72.0 | 72.0 | 133.3 |
| 40000 | 60.7 | 66.2 | 69.0 | 70.2 | 74.2 | 74.7 | 70.7 | 71.0 | 72.7 | 72.4 | 68.4 | 65.2 | 66.2 | 128.3 |
| 50000 | 53.3 | 58.1 | 60.3 | 63.0 | 65.2 | 66.2 | 65.2 | 63.6 | 68.1 | 65.6 | 62.2 | 58.9 | 58.3 | 125.8 |
| 63000 | 48.7 | 53.4 | 55.3 | 57.6 | 58.0 | 58.7 | 59.9 | 56.5 | 63.4 | 58.1 | 54.6 | 52.4 | 51.7 | 124.8 |
| 80000 | 41.9 | 45.2 | 48.0 | 50.9 | 49.6 | 51.1 | 50.8 | 50.3 | 55.4 | 50.9 | 48.1 | 43.3 | 42.8 | 123.9 |

OASPL 92.6 96.7 98.6 97.2 98.5 100.2 100.9 102.9 107.2 107.4 107.6 107.6 106.1 146.4

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000
FREE JET VELOCITY (FT/SEC) 0.
FREE JET DIAMETER (IN) 48.00
REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

TEST DATE 02-21-78 TAPE NO. N294 ALPHA SB59 TAMB 23.00
LOCATION C41 ANECH CH AERO. RDG. ADH089 PAMB 29.3720 RELHUM 45.00

MODEL TEST POINT 7500
ACQUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

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08/30/79 19.452

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMDDL X75051

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 56.1 | 60.4 | 62.0 | 62.8 | 64.0 | 66.0 | 66.8 | 68.0 | 73.3 | 76.0 | 75.6 | 74.6 | 69.4 | 151.4 |
| 63 | 56.7 | 61.3 | 63.6 | 63.3 | 65.1 | 67.4 | 67.9 | 69.1 | 74.1 | 76.1 | 75.9 | 73.7 | 68.2 | 151.4 |
| 80 | 57.0 | 62.6 | 63.2 | 64.4 | 70.7 | 69.2 | 68.7 | 70.4 | 74.9 | 75.9 | 75.7 | 72.4 | 66.2 | 151.4 |
| 100 | 59.2 | 62.3 | 63.6 | 65.9 | 66.9 | 68.7 | 69.4 | 71.2 | 76.4 | 76.9 | 76.2 | 71.6 | 65.3 | 151.7 |
| 125 | 60.2 | 63.0 | 64.7 | 65.2 | 66.7 | 69.4 | 70.2 | 71.9 | 76.9 | 76.4 | 74.2 | 70.6 | 64.7 | 151.6 |
| 160 | 58.6 | 65.0 | 65.9 | 66.7 | 67.7 | 70.4 | 70.9 | 72.4 | 76.5 | 75.6 | 74.1 | 70.4 | 63.9 | 151.6 |
| 200 | 60.4 | 64.5 | 65.6 | 66.7 | 67.7 | 70.2 | 71.2 | 73.2 | 77.0 | 75.1 | 73.4 | 69.4 | 63.6 | 151.7 |
| 250 | 59.1 | 65.0 | 65.5 | 66.3 | 67.1 | 68.8 | 70.1 | 72.5 | 76.6 | 74.4 | 71.9 | 68.1 | 62.1 | 151.2 |
| 315 | 58.6 | 65.9 | 66.4 | 66.9 | 68.0 | 69.5 | 70.7 | 72.4 | 75.8 | 74.3 | 70.7 | 67.4 | 60.9 | 151.3 |
| 400 | 57.6 | 64.5 | 65.1 | 66.4 | 67.0 | 69.7 | 70.7 | 72.4 | 75.5 | 71.9 | 69.0 | 65.8 | 59.0 | 150.8 |
| 500 | 56.7 | 62.6 | 64.1 | 65.0 | 66.3 | 68.8 | 69.8 | 71.2 | 74.0 | 70.7 | 67.1 | 63.3 | 56.3 | 149.9 |
| 630 | 55.6 | 60.5 | 62.4 | 64.6 | 66.4 | 68.4 | 69.9 | 71.3 | 73.6 | 70.2 | 65.7 | 61.7 | 55.4 | 149.9 |
| 800 | 53.6 | 60.4 | 62.4 | 64.1 | 65.4 | 68.4 | 68.9 | 70.1 | 72.6 | 69.1 | 64.2 | 60.1 | 53.7 | 149.5 |
| 1000 | 52.0 | 59.3 | 61.4 | 63.3 | 65.4 | 67.5 | 68.1 | 69.4 | 71.6 | 67.7 | 63.1 | 58.9 | 52.0 | 149.1 |
| 1250 | 49.7 | 58.3 | 60.6 | 62.0 | 64.5 | 67.3 | 66.5 | 68.7 | 70.2 | 66.3 | 61.5 | 57.7 | 49.9 | 148.9 |
| 1600 | 46.9 | 56.0 | 58.2 | 60.7 | 62.9 | 65.5 | 65.3 | 68.7 | 67.5 | 64.2 | 59.1 | 54.5 | 46.4 | 148.0 |
| 2000 | 43.6 | 53.8 | 57.4 | 59.8 | 62.9 | 64.9 | 62.9 | 64.5 | 65.2 | 63.1 | 56.1 | 51.8 | 41.8 | 148.0 |
| 2500 | 37.1 | 51.1 | 53.6 | 57.2 | 61.3 | 63.1 | 60.3 | 61.0 | 61.4 | 58.3 | 51.0 | 45.1 | 33.0 | 147.2 |
| 3150 | 40.3 | 52.5 | 57.0 | 58.4 | 62.0 | 63.5 | 60.0 | 57.2 | 57.5 | 51.4 | 43.5 | 36.1 | 22.4 | 149.9 |
| 4000 | 33.6 | 46.1 | 52.4 | 55.7 | 56.3 | 57.7 | 55.7 | 51.9 | 50.7 | 45.9 | 34.8 | 21.7 | 1.9 | 151.2 |
| 5000 | 11.6 | 25.5 | 33.4 | 37.8 | 43.5 | 44.5 | 40.0 | 38.6 | 37.1 | 31.6 | 19.2 | 1.7 | | 146.0 |
| 6300 | | | | | | | | | | | | | | 143.3 |
| 8000 | | | | | | | | | | | | | | 142.5 |
| 10000 | | | | | | | | | | | | | | 141.6 |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| QASPL | 69.3 | 74.6 | 76.1 | 77.2 | 79.1 | 80.9 | 81.5 | 83.2 | 86.9 | 86.0 | 84.3 | 81.4 | 75.5 | 163.7 |
| PNL | 72.5 | 79.9 | 82.5 | 84.1 | 86.8 | 88.7 | 87.5 | 88.7 | 91.5 | 89.1 | 85.7 | 81.5 | 74.3 | |
| PNLT | 74.7 | 81.9 | 84.5 | 85.8 | 87.9 | 89.8 | 88.8 | 88.7 | 91.5 | 89.1 | 85.7 | 81.5 | 75.4 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-21-78 TAPE NO. N294 IALPHA SB59 TAMB 23.00
 LOCATION C41 ANECH CH AERO. RDG. ADH089 PAMB 29.3720 RELHUM 45.00

MODEL TEST POINT 7505 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 0. FREE-JET SPEED
 669

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X75060
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|-------|-------|-------|------|------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 70.2 | 69.7 | 70.9 | 72.6 | 72.7 | 74.1 | 74.7 | 76.0 | 80.0 | 86.5 | 90.2 | 92.3 | 92.6 | 126.3 |
| 315 | 70.8 | 72.1 | 72.5 | 73.3 | 74.3 | 76.3 | 76.7 | 78.3 | 82.1 | 87.7 | 89.7 | 91.1 | 90.7 | 125.9 |
| 400 | 72.4 | 73.3 | 73.6 | 74.1 | 74.9 | 76.7 | 77.6 | 79.1 | 83.1 | 90.5 | 91.3 | 89.6 | 88.7 | 126.6 |
| 500 | 72.0 | 72.6 | 76.7 | 74.6 | 85.2 | 78.1 | 78.7 | 81.3 | 84.3 | 91.0 | 92.1 | 87.4 | 86.7 | 127.2 |
| 630 | 73.3 | 74.5 | 75.6 | 75.8 | 79.0 | 79.2 | 79.9 | 82.3 | 86.0 | 92.3 | 92.2 | 86.4 | 85.1 | 131.2 |
| 800 | 75.5 | 74.4 | 76.4 | 77.4 | 79.2 | 80.1 | 81.1 | 84.3 | 87.5 | 92.6 | 91.0 | 82.7 | 83.0 | 127.5 |
| 1000 | 75.5 | 74.6 | 77.5 | 77.2 | 78.8 | 81.2 | 82.2 | 85.0 | 88.7 | 92.2 | 89.8 | 80.8 | 83.9 | 127.4 |
| 1250 | 76.5 | 76.9 | 78.4 | 78.7 | 80.3 | 82.2 | 83.4 | 86.2 | 89.6 | 91.8 | 89.4 | 79.9 | 82.3 | 127.5 |
| 1600 | 77.6 | 75.6 | 77.9 | 78.9 | 81.0 | 82.7 | 83.6 | 86.6 | 89.6 | 90.9 | 88.4 | 78.4 | 80.4 | 127.4 |
| 2000 | 76.8 | 77.0 | 78.3 | 79.3 | 80.7 | 82.3 | 83.9 | 87.2 | 89.9 | 90.9 | 87.0 | 79.4 | 79.2 | 127.3 |
| 2500 | 78.6 | 78.2 | 79.5 | 79.7 | 81.5 | 83.1 | 84.3 | 87.1 | 89.0 | 90.4 | 85.6 | 78.1 | 79.4 | 127.1 |
| 3150 | 78.1 | 78.3 | 79.5 | 81.2 | 82.3 | 83.7 | 85.1 | 87.6 | 89.5 | 88.9 | 85.4 | 79.2 | 77.6 | 127.2 |
| 4000 | 77.7 | 76.9 | 79.2 | 79.8 | 81.9 | 83.3 | 84.2 | 87.0 | 88.2 | 87.8 | 84.2 | 77.0 | 76.2 | 126.3 |
| 5000 | 76.9 | 77.2 | 78.7 | 79.9 | 82.0 | 83.3 | 84.5 | 87.3 | 88.0 | 87.9 | 84.0 | 76.3 | 76.5 | 126.5 |
| 6300 | 76.4 | 77.2 | 79.0 | 79.6 | 82.2 | 83.5 | 84.5 | 86.2 | 87.5 | 87.1 | 82.3 | 76.0 | 75.3 | 126.2 |
| 8000 | 76.0 | 77.2 | 78.1 | 79.3 | 82.1 | 83.0 | 83.8 | 85.5 | 86.0 | 85.8 | 81.8 | 75.4 | 73.5 | 126.0 |
| 10000 | 75.3 | 76.2 | 77.9 | 78.3 | 81.7 | 83.2 | 82.7 | 85.6 | 85.6 | 85.8 | 80.8 | 76.6 | 74.5 | 126.0 |
| 12500 | 73.4 | 75.5 | 76.4 | 77.4 | 81.1 | 81.1 | 81.1 | 83.4 | 83.9 | 83.4 | 78.9 | 74.4 | 71.1 | 125.1 |
| 16000 | 72.6 | 74.7 | 76.5 | 77.3 | 81.7 | 81.3 | 80.1 | 82.0 | 82.1 | 82.4 | 77.0 | 73.3 | 73.5 | 125.7 |
| 20000 | 68.7 | 72.6 | 74.1 | 75.2 | 81.2 | 80.4 | 77.8 | 79.3 | 79.9 | 78.9 | 74.5 | 71.1 | 73.5 | 125.5 |
| 25000 | 69.6 | 71.0 | 73.6 | 74.1 | 80.1 | 78.7 | 74.9 | 75.3 | 77.3 | 74.5 | 70.5 | 67.2 | 72.3 | 125.7 |
| 31500 | 69.0 | 68.5 | 71.7 | 73.9 | 76.8 | 74.8 | 73.4 | 72.8 | 75.1 | 72.8 | 68.8 | 62.8 | 60.1 | 126.3 |
| 40000 | 62.7 | 62.4 | 65.9 | 67.1 | 75.0 | 71.1 | 67.2 | 67.5 | 69.7 | 66.5 | 63.5 | 57.5 | 56.0 | 125.9 |
| 50000 | 54.6 | 56.6 | 57.8 | 60.8 | 63.9 | 63.3 | 62.0 | 59.8 | 63.9 | 59.4 | 57.1 | 52.1 | 50.1 | 124.3 |
| 63000 | 49.1 | 49.5 | 51.6 | 54.0 | 65.0 | 54.6 | 56.3 | 53.3 | 58.5 | 51.9 | 50.0 | 46.2 | 43.8 | 124.0 |
| 80000 | 43.7 | 43.0 | 45.3 | 48.4 | 62.3 | 48.3 | 48.3 | 47.4 | 51.5 | 45.6 | 44.6 | 38.3 | 33.8 | 126.8 |
| GASPL | 88.6 | 88.9 | 90.6 | 91.3 | 98.8 | 94.8 | 95.4 | 98.0 | 100.0 | 102.4 | 101.1 | 97.6 | 97.5 | 140.9 |

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OF POOR QUALITYTEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 39.00
LOCATION C41 ANECH CH AERG. RDG. ADH111 PAMB 29.3300 RELHUM 54.60

MODEL TEST POINT 7506 ACQUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.96 M/SEC (367.0 FPS) FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X75060

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PHL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

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6300000

8000000

10000000

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 387.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 5859 TAPB 39.00
LOCATION C41 ANECH CH AERO. RDG. ADH111 PAMB 28.3300 RELNUM 54.80

MODEL TEST POINT 7506 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 11.95 M/SEC (387.0 FPS) FREE-JET SPEED

07/19/79 18.286

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X30200

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. FHL

FREQ

50

63

80

100

125

160

200

250 85.1 85.9 84.8 85.0 83.5 84.2 84.6 84.6 88.6 95.4 99.6 102.7 101.4 136.0

315 85.1 85.9 84.8 85.0 83.5 84.2 84.6 84.6 88.6 95.4 99.6 102.7 101.4 140.4

400 86.4 87.0 86.1 84.7 85.8 86.5 86.9 87.6 87.6 93.4 102.8 107.0 106.2 140.8

500 87.7 87.6 87.0 85.9 91.2 87.7 87.7 88.5 95.6 104.5 108.0 106.0 99.7 141.7

630 89.0 88.1 89.6 87.3 103.2 89.2 89.1 90.8 97.8 105.5 109.4 105.5 100.8 143.3

800 92.6 91.9 92.6 89.6 89.5 90.6 90.5 92.7 99.8 106.1 109.5 104.1 102.3 142.9

1000 92.3 90.1 91.0 90.6 90.7 92.1 92.3 94.4 100.6 105.8 109.0 103.3 101.8 142.7

1250 93.7 91.4 92.4 90.8 91.7 93.4 93.1 95.7 101.8 106.1 108.3 102.7 102.3 142.7

1600 92.5 93.9 94.2 92.8 92.5 94.0 94.2 96.6 102.2 106.5 106.9 102.6 101.8 142.5

2000 93.9 91.9 93.2 92.3 91.9 93.9 94.6 97.5 102.5 107.0 106.7 102.5 101.8 142.7

2500 93.1 93.1 93.4 92.1 93.3 94.9 95.8 98.2 103.9 106.5 106.4 103.4 102.5 142.9

3150 93.0 93.0 93.7 92.7 93.7 95.6 96.3 99.3 102.9 106.1 106.3 103.1 102.7 142.8

4000 93.8 93.4 93.6 93.5 94.0 96.2 97.0 99.5 103.7 106.5 106.0 102.3 102.2 143.1

5000 94.1 93.1 94.4 93.6 95.1 97.2 97.2 97.0 100.4 103.6 105.8 105.4 102.1 143.1

6300 95.6 94.3 94.7 94.0 95.3 97.7 97.4 100.0 103.5 105.3 105.4 102.8 103.6 143.4

8000 97.5 96.2 95.9 94.7 95.5 96.9 97.0 98.9 103.2 105.1 104.6 103.3 104.6 143.6

10000 97.2 97.9 96.5 95.4 97.2 98.1 96.5 99.6 101.9 103.9 103.7 103.7 104.6 143.9

12500 97.4 98.6 98.9 97.5 97.7 97.6 96.8 98.4 101.3 104.2 102.2 102.8 104.6 144.6

16000 94.9 96.1 96.5 96.3 97.2 97.7 95.5 97.5 100.2 100.6 99.0 99.9 102.0 143.9

20000 93.5 94.9 95.1 95.5 97.1 96.9 93.3 95.5 96.4 95.2 94.2 95.9 99.2 143.3

25000 91.1 94.5 93.7 93.8 95.2 94.3 90.6 89.5 96.2 96.6 93.6 92.9 97.2 144.1

31500 89.4 90.1 91.0 90.0 89.9 89.9 88.1 89.2 90.3 89.6 87.1 86.6 91.7 142.8

40000 84.6 83.6 86.0 87.4 89.5 88.4 83.2 83.0 86.4 83.4 81.9 82.5 86.3 143.1

50000 82.2 81.1 82.7 83.1 81.3 81.2 78.5 76.8 82.4 77.9 77.0 78.3 81.5 142.3

63000 73.8 73.0 74.4 75.8 72.3 72.7 73.0 70.2 77.6 73.8 75.8 74.3 77.0 141.1

80000 64.6 63.4 64.9 66.3 65.4 66.6 65.6 64.9 67.7 64.0 66.0 64.5 67.2 139.2

GASPL 106.9 107.0 107.2 106.4 108.7 108.3 107.7 110.1 114.3 117.9 119.3 116.7 115.6 156.8

MODEL/FULL SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 389.00 REFRACTION CORRECTION - YES
 INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 03-16-78 TAPE NO. N300 IALPHA SB59 TAMB 40.28
 LOCATION C41 ANECH CH AERO. RDG. ADH149 PAMB 29.5450 RELHUM 22.30

MODEL TEST POINT 30200 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 110.1 SQ CM (17.07 SQ IN) - MODEL 118.57 M/SEC (389.0 FPS)
 SIZE FREE-JET SPEED

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FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X30205

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 67.4 | 68.8 | 69.3 | 68.9 | 74.6 | 71.3 | 71.2 | 71.5 | 77.9 | 85.7 | 87.7 | 83.5 | 73.9 | 160.8 |
| 63 | 68.7 | 69.3 | 71.9 | 70.3 | 86.6 | 72.7 | 72.6 | 73.8 | 80.1 | 86.7 | 89.1 | 83.0 | 74.9 | 162.4 |
| 80 | 72.3 | 73.1 | 74.8 | 72.6 | 72.8 | 74.1 | 73.9 | 75.6 | 82.1 | 87.3 | 89.1 | 81.5 | 76.4 | 162.1 |
| 100 | 71.8 | 71.2 | 73.2 | 73.5 | 74.0 | 75.6 | 75.6 | 77.3 | 82.8 | 87.0 | 88.5 | 80.6 | 75.6 | 161.8 |
| 125 | 73.1 | 72.4 | 74.5 | 73.6 | 75.0 | 76.8 | 76.3 | 78.5 | 83.9 | 87.1 | 87.7 | 79.9 | 75.9 | 161.8 |
| 160 | 71.8 | 74.8 | 76.1 | 75.5 | 75.7 | 77.3 | 77.4 | 79.3 | 84.2 | 87.3 | 86.1 | 79.5 | 75.1 | 161.7 |
| 200 | 72.9 | 72.5 | 75.0 | 74.9 | 74.9 | 77.0 | 77.6 | 80.0 | 84.3 | 87.7 | 85.7 | 79.1 | 74.6 | 161.8 |
| 250 | 71.8 | 73.5 | 75.0 | 74.5 | 76.1 | 77.8 | 78.7 | 80.6 | 85.4 | 86.9 | 85.1 | 79.6 | 74.7 | 162.1 |
| 315 | 71.3 | 73.1 | 75.0 | 74.8 | 76.2 | 78.3 | 78.9 | 81.4 | 84.2 | 86.2 | 84.6 | 78.8 | 74.0 | 162.0 |
| 400 | 71.6 | 73.1 | 74.6 | 75.3 | 76.3 | 78.7 | 79.3 | 81.4 | 84.7 | 86.2 | 83.8 | 77.3 | 72.6 | 162.2 |
| 500 | 71.5 | 72.5 | 75.2 | 75.2 | 77.1 | 79.4 | 79.4 | 82.0 | 84.3 | 85.2 | 82.8 | 76.6 | 72.8 | 162.3 |
| 630 | 72.6 | 73.4 | 75.2 | 75.4 | 77.2 | 79.7 | 79.3 | 81.4 | 83.9 | 84.4 | 82.4 | 76.7 | 72.2 | 162.5 |
| 800 | 74.2 | 76.1 | 76.2 | 75.9 | 77.3 | 78.9 | 78.8 | 80.1 | 83.5 | 84.0 | 81.3 | 76.5 | 72.1 | 162.8 |
| 1000 | 73.6 | 76.6 | 76.7 | 76.7 | 79.0 | 80.1 | 78.4 | 80.9 | 82.2 | 82.6 | 80.1 | 76.5 | 71.1 | 163.1 |
| 1250 | 73.5 | 77.2 | 79.2 | 78.9 | 79.7 | 79.8 | 78.8 | 79.7 | 81.6 | 82.8 | 78.4 | 75.0 | 69.9 | 163.8 |
| 1600 | 70.7 | 74.7 | 76.9 | 77.9 | 79.4 | 80.1 | 77.7 | 79.0 | 80.6 | 79.2 | 74.8 | 71.3 | 65.5 | 163.1 |
| 2000 | 68.8 | 73.3 | 75.5 | 77.2 | 79.6 | 79.6 | 75.7 | 77.2 | 76.8 | 73.5 | 69.5 | 66.0 | 60.1 | 162.4 |
| 2500 | 65.2 | 72.3 | 73.8 | 75.4 | 77.7 | 77.1 | 73.1 | 71.1 | 76.4 | 74.4 | 67.7 | 60.9 | 53.8 | 163.3 |
| 3150 | 60.9 | 66.2 | 70.0 | 70.9 | 71.8 | 72.2 | 70.0 | 70.1 | 69.4 | 65.7 | 58.5 | 50.3 | 40.8 | 161.9 |
| 4000 | 50.7 | 55.8 | 62.0 | 65.8 | 69.2 | 68.6 | 62.9 | 61.5 | 62.4 | 55.6 | 48.0 | 38.2 | 21.7 | 162.2 |
| 5000 | 38.9 | 46.2 | 52.9 | 56.6 | 56.4 | 56.9 | 53.7 | 50.2 | 52.7 | 43.0 | 33.7 | 20.7 | 161.5 | |
| 6300 | 19.7 | 24.8 | 33.5 | 39.4 | 38.3 | 39.5 | 39.1 | 33.7 | 36.7 | 25.6 | 15.6 | | 160.3 | |
| 8000 | | | 4.2 | 12.2 | 14.8 | 17.1 | 15.0 | 10.7 | 7.0 | | | | 158.4 | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GASPL 84.3 86.2 88.0 88.0 91.3 90.7 90.0 91.9 95.4 97.9 97.7 91.5 85.9 175.7
 PNLT 91.2 95.0 97.0 97.9 100.0 100.3 98.1 99.4 101.9 102.5 100.4 94.3 88.9
 PNLT 92.7 96.3 98.1 98.5 101.2 100.3 98.6 99.4 102.7 104.1 100.4 94.3 88.9

DIAMETER RATIO 9.056 FREQUENCY SHIFT -10

TEST DATE 03-16-78 TAPE NO. N300 IALPHA SB59 TAMB 40.28
 LOCATION C41 ANECH CH AERO. RDG. ADH149 PAMB 29.5450 RELHUM 22.30

MODEL TEST POINT 3020 ACQUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 118.57 M/SEC (389.0 FPS)
 SIZE

FREE-JET SPEED

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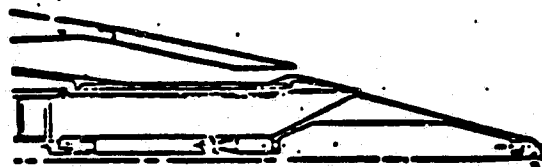
6.1.8 Measured Acoustic Data for Model 7

$R_r^o = 0.853$ conic outer nozzle

$R_r^i = 0.902$ conic inner nozzle

$A^i/A^o = 0.521$

without struts in outer flow



07/19/79 18.682

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X70010
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 87.3 | 92.3 | 91.1 | 91.9 | 92.7 | 94.8 | 97.2 | 98.4 | 103.8 | 108.9 | 113.3 | 116.5 | 116.1 | 149.7 |
| 315 | 88.9 | 91.2 | 91.4 | 92.2 | 93.8 | 95.9 | 96.6 | 99.0 | 105.4 | 111.3 | 114.6 | 117.8 | 116.2 | 150.9 |
| 400 | 90.4 | 92.7 | 92.5 | 93.8 | 93.8 | 96.0 | 97.6 | 99.3 | 107.0 | 114.8 | 117.4 | 119.3 | 116.5 | 152.9 |
| 500 | 91.2 | 93.5 | 94.3 | 93.8 | 95.7 | 97.0 | 98.7 | 100.6 | 108.1 | 116.1 | 119.0 | 119.9 | 116.8 | 153.9 |
| 630 | 92.9 | 95.1 | 95.2 | 95.2 | 101.8 | 98.9 | 100.0 | 102.7 | 109.9 | 116.2 | 120.1 | 120.0 | 117.5 | 154.6 |
| 800 | 97.1 | 96.2 | 96.7 | 97.5 | 97.6 | 99.4 | 101.3 | 104.2 | 112.0 | 116.8 | 120.9 | 120.6 | 117.5 | 155.2 |
| 1000 | 100.7 | 101.5 | 102.3 | 100.3 | 99.7 | 101.5 | 102.7 | 105.1 | 113.3 | 116.4 | 120.3 | 120.4 | 116.8 | 155.1 |
| 1250 | 98.4 | 101.9 | 101.9 | 102.0 | 103.1 | 103.7 | 103.8 | 106.2 | 113.1 | 115.0 | 121.4 | 120.8 | 115.7 | 155.5 |
| 1600 | 105.7 | 102.6 | 102.1 | 100.9 | 101.0 | 103.1 | 104.2 | 107.1 | 113.8 | 116.2 | 121.4 | 118.6 | 113.9 | 155.1 |
| 2000 | 107.4 | 106.7 | 106.2 | 103.7 | 101.6 | 102.2 | 103.8 | 107.2 | 114.6 | 117.8 | 120.8 | 116.2 | 111.5 | 155.0 |
| 2500 | 106.8 | 106.1 | 106.9 | 106.2 | 105.7 | 103.6 | 104.7 | 107.2 | 114.3 | 117.5 | 119.2 | 114.9 | 109.9 | 154.3 |
| 3150 | 104.6 | 105.2 | 105.7 | 105.7 | 106.5 | 106.6 | 106.0 | 107.7 | 114.1 | 116.3 | 117.5 | 113.9 | 108.4 | 153.4 |
| 4000 | 103.1 | 103.2 | 104.5 | 104.0 | 104.8 | 106.4 | 106.3 | 108.0 | 113.9 | 116.4 | 116.3 | 110.9 | 106.4 | 152.8 |
| 5000 | 102.2 | 102.6 | 104.3 | 103.8 | 103.9 | 105.5 | 107.4 | 108.6 | 112.7 | 116.5 | 114.6 | 109.8 | 105.5 | 152.4 |
| 6300 | 100.2 | 101.8 | 103.6 | 103.5 | 104.6 | 105.7 | 106.3 | 109.0 | 112.7 | 114.9 | 113.2 | 109.0 | 105.0 | 151.8 |
| 8000 | 99.3 | 101.1 | 102.3 | 103.1 | 104.4 | 105.1 | 105.9 | 108.5 | 111.9 | 113.0 | 112.1 | 107.0 | 103.8 | 151.1 |
| 10000 | 97.4 | 100.0 | 101.6 | 102.8 | 104.8 | 105.3 | 105.2 | 107.7 | 110.3 | 112.5 | 110.2 | 106.3 | 102.7 | 150.7 |
| 12500 | 94.7 | 98.3 | 99.7 | 101.3 | 102.9 | 103.8 | 104.2 | 105.6 | 107.9 | 109.9 | 108.2 | 103.5 | 101.2 | 149.4 |
| 16000 | 92.4 | 96.4 | 98.7 | 99.8 | 102.0 | 103.3 | 102.2 | 104.1 | 106.2 | 108.4 | 105.3 | 101.6 | 99.4 | 149.1 |
| 20000 | 87.4 | 93.7 | 95.5 | 97.1 | 101.2 | 101.7 | 99.4 | 101.0 | 102.8 | 104.5 | 102.2 | 99.3 | 97.0 | 148.0 |
| 25000 | 86.5 | 90.3 | 93.5 | 93.4 | 98.3 | 98.7 | 96.3 | 96.2 | 100.5 | 100.1 | 98.2 | 95.2 | 94.3 | 147.0 |
| 31500 | 84.5 | 86.5 | 90.8 | 92.2 | 93.2 | 93.3 | 92.4 | 93.4 | 96.3 | 98.1 | 95.2 | 90.5 | 88.3 | 146.6 |
| 40000 | 79.2 | 81.7 | 85.2 | 87.2 | 91.5 | 91.4 | 87.5 | 88.0 | 91.5 | 93.1 | 90.6 | 85.0 | 83.4 | 146.3 |
| 50000 | 72.3 | 75.1 | 78.1 | 80.6 | 83.0 | 83.8 | 82.7 | 81.9 | 87.4 | 86.8 | 84.7 | 80.4 | 78.1 | 144.5 |
| 63000 | 66.8 | 71.4 | 72.3 | 73.8 | 74.8 | 75.2 | 78.0 | 75.3 | 83.2 | 80.1 | 78.6 | 74.4 | 72.0 | 144.0 |
| 80000 | 60.5 | 67.8 | 66.3 | 69.5 | 68.2 | 70.4 | 70.4 | 70.3 | 77.2 | 75.7 | 73.7 | 67.1 | 65.1 | 145.2 |

GASPL 114.3 114.4 115.1 114.8 115.7 116.3 116.8 119.0 124.7 128.1 130.7 129.8 126.5 166.3

TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAMB 27.68
LOCATION C41 ANECH CH AERO. RDG. ADH083 PAMB 29.3220 RELHUM 29.00

MODEL TEST POINT 7001 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED 0. FPS

ORIGINAL PAGE 18
OF POOR QUALITY

07/19/79 19.682

48
N2

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG F, 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X70010

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50
80
100
125
160
200

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 87.3 | 92.3 | 91.1 | 91.9 | 92.7 | 94.8 | 97.2 | 98.4 | 103.8 | 108.9 | 113.3 | 116.5 | 116.1 | 149.7 |
| 315 | 88.9 | 91.2 | 91.4 | 92.2 | 93.8 | 95.9 | 96.6 | 99.0 | 105.4 | 111.3 | 114.6 | 117.8 | 116.2 | 150.8 |
| 400 | 90.4 | 92.7 | 92.5 | 92.3 | 93.8 | 96.0 | 97.6 | 99.3 | 107.0 | 114.8 | 117.4 | 119.3 | 116.5 | 152.9 |
| 500 | 91.2 | 93.5 | 94.3 | 93.8 | 95.7 | 97.0 | 98.7 | 100.6 | 108.1 | 116.1 | 119.0 | 119.9 | 116.8 | 153.9 |
| 630 | 92.9 | 95.1 | 95.2 | 95.2 | 96.2 | 97.8 | 98.9 | 100.0 | 102.7 | 103.9 | 116.2 | 120.1 | 120.0 | 117.5 |
| 800 | 97.1 | 96.2 | 96.7 | 97.5 | 97.6 | 99.4 | 101.3 | 104.2 | 112.0 | 116.8 | 120.9 | 120.6 | 117.5 | 155.2 |
| 1000 | 100.7 | 101.5 | 102.3 | 100.3 | 99.7 | 101.5 | 102.7 | 105.1 | 113.3 | 116.4 | 120.3 | 120.4 | 116.8 | 155.1 |
| 1250 | 98.4 | 101.9 | 101.9 | 102.0 | 103.1 | 103.7 | 103.8 | 106.2 | 113.1 | 116.0 | 121.4 | 120.8 | 115.7 | 155.5 |
| 1600 | 105.7 | 102.6 | 102.1 | 100.9 | 101.0 | 103.1 | 104.2 | 107.1 | 113.8 | 116.2 | 121.4 | 118.6 | 113.9 | 155.1 |
| 2000 | 107.4 | 106.7 | 106.2 | 103.7 | 101.6 | 102.2 | 103.8 | 107.2 | 114.6 | 117.8 | 120.8 | 116.2 | 111.5 | 155.0 |
| 2500 | 106.8 | 106.1 | 106.9 | 106.2 | 105.7 | 103.6 | 104.7 | 107.2 | 114.3 | 117.5 | 119.2 | 114.9 | 109.9 | 154.3 |
| 3150 | 104.6 | 105.2 | 105.7 | 105.7 | 106.5 | 106.6 | 106.0 | 107.7 | 114.1 | 116.3 | 117.5 | 113.9 | 108.4 | 153.4 |
| 4000 | 103.1 | 103.2 | 104.5 | 104.0 | 104.8 | 106.4 | 106.3 | 108.0 | 113.9 | 116.4 | 116.3 | 110.9 | 106.4 | 152.8 |
| 5000 | 102.2 | 102.6 | 104.3 | 103.8 | 103.9 | 105.5 | 107.4 | 108.6 | 112.7 | 116.5 | 114.6 | 109.8 | 105.5 | 152.4 |
| 6300 | 100.2 | 101.8 | 103.6 | 103.5 | 104.6 | 105.7 | 106.3 | 109.0 | 112.7 | 114.9 | 113.2 | 109.0 | 105.0 | 151.8 |
| 8000 | 99.3 | 101.1 | 102.3 | 103.1 | 104.4 | 105.1 | 105.9 | 108.5 | 111.9 | 113.0 | 112.1 | 107.0 | 103.8 | 151.1 |
| 10000 | 97.4 | 100.0 | 101.6 | 102.8 | 104.6 | 105.3 | 105.2 | 107.7 | 110.3 | 112.5 | 110.2 | 106.3 | 102.7 | 150.7 |
| 12500 | 94.7 | 98.3 | 99.7 | 101.3 | 102.9 | 103.8 | 104.2 | 105.6 | 107.9 | 109.9 | 108.2 | 103.5 | 101.2 | 149.4 |
| 16000 | 92.4 | 96.4 | 98.7 | 99.8 | 102.0 | 103.3 | 102.2 | 104.1 | 106.2 | 108.4 | 105.3 | 101.6 | 99.4 | 149.1 |
| 20000 | 87.4 | 93.7 | 95.5 | 97.1 | 101.2 | 101.7 | 99.4 | 101.0 | 102.8 | 104.5 | 102.2 | 99.3 | 97.0 | 148.0 |
| 25000 | 86.5 | 90.3 | 93.5 | 93.4 | 98.3 | 98.7 | 96.5 | 96.2 | 100.5 | 100.1 | 98.2 | 95.2 | 94.3 | 147.0 |
| 31500 | 84.5 | 86.5 | 90.8 | 92.2 | 93.2 | 93.3 | 92.4 | 93.4 | 96.3 | 98.1 | 95.2 | 90.5 | 88.3 | 146.6 |
| 40000 | 79.2 | 81.7 | 85.2 | 87.2 | 91.5 | 91.4 | 87.5 | 88.0 | 91.5 | 93.1 | 90.6 | 85.0 | 83.4 | 146.3 |
| 50000 | 72.3 | 75.1 | 78.1 | 80.6 | 83.0 | 83.8 | 82.7 | 81.9 | 87.4 | 86.8 | 84.7 | 80.4 | 78.1 | 144.5 |
| 63000 | 66.8 | 71.4 | 72.3 | 73.9 | 74.8 | 75.2 | 78.0 | 75.3 | 83.2 | 80.1 | 78.6 | 74.4 | 72.0 | 144.0 |
| 80000 | 60.5 | 67.8 | 66.3 | 69.5 | 68.2 | 70.4 | 70.4 | 70.3 | 77.2 | 76.7 | 73.7 | 67.1 | 65.1 | 145.2 |

GASPL 114.3 114.4 115.1 114.8 115.7 116.3 116.8 119.0 124.7 128.1 130.7 129.8 126.5 166.3

MODEL/FULL SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 0 REFRACCTION CORRECTION - YES
INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAMB 27.68
LOCATION C41 ANECH CH AERO. RDG. ADH083 PAMB 29.3220 RELHUM 29.00

MODEL TEST POINT 7001 ACQUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. M/SEC (0. FPS)
FREE-JET SPEED

ORIGINAL PAGE 13
OF POOR QUALITY

07/19/79 18.682

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F. 70 PERCENT R.H. STD. DAY SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X70011

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 68.6 | 72.5 | 73.3 | 73.8 | 75.8 | 78.0 | 79.5 | 80.8 | 82.8 | 84.5 | 85.6 | 85.4 | 89.2 | 170.5 |
| 63 | 69.4 | 73.3 | 75.1 | 75.4 | 77.6 | 79.1 | 80.6 | 82.1 | 88.9 | 95.9 | 97.2 | 95.9 | 89.5 | 171.6 |
| 80 | 71.0 | 74.8 | 75.9 | 76.7 | 83.7 | 80.9 | 81.9 | 84.2 | 90.7 | 95.9 | 98.3 | 96.0 | 90.0 | 172.2 |
| 100 | 75.2 | 75.8 | 77.4 | 78.9 | 79.4 | 81.4 | 83.2 | 85.7 | 92.7 | 96.4 | 99.0 | 96.4 | 89.9 | 172.9 |
| 125 | 78.7 | 81.1 | 82.9 | 81.7 | 81.5 | 83.5 | 84.5 | 86.5 | 93.9 | 95.9 | 98.2 | 96.1 | 89.0 | 172.7 |
| 160 | 76.1 | 81.3 | 82.4 | 83.2 | 84.7 | 85.5 | 85.5 | 87.5 | 93.6 | 95.4 | 99.1 | 96.2 | 87.5 | 173.2 |
| 200 | 83.2 | 81.8 | 82.4 | 82.0 | 82.5 | 84.7 | 85.7 | 88.2 | 94.1 | 95.4 | 98.9 | 93.7 | 85.2 | 172.8 |
| 250 | 84.6 | 85.6 | 86.3 | 84.6 | 82.9 | 83.6 | 85.1 | 88.1 | 94.7 | 96.7 | 97.9 | 90.8 | 82.1 | 172.7 |
| 315 | 83.6 | 84.7 | 86.7 | 86.7 | 86.8 | 84.8 | 85.8 | 87.7 | 94.1 | 96.1 | 95.9 | 89.0 | 79.7 | 172.0 |
| 400 | 80.9 | 83.3 | 85.1 | 85.9 | 87.2 | 87.5 | 86.7 | 87.9 | 93.5 | 94.5 | 93.7 | 87.3 | 77.2 | 171.1 |
| 500 | 78.9 | 81.0 | 83.6 | 83.9 | 85.3 | 87.0 | 86.8 | 87.9 | 93.0 | 94.1 | 92.1 | 83.7 | 74.3 | 170.5 |
| 630 | 77.5 | 79.9 | 83.1 | 83.5 | 84.1 | 85.8 | 87.6 | 88.2 | 91.5 | 93.8 | 89.9 | 81.9 | 72.3 | 170.0 |
| 800 | 75.0 | 78.8 | 82.0 | 82.9 | 84.5 | 85.8 | 86.3 | 88.4 | 91.2 | 91.9 | 88.0 | 80.5 | 70.6 | 169.5 |
| 1000 | 73.8 | 77.8 | 80.5 | 82.4 | 84.2 | 85.1 | 85.7 | 87.7 | 90.2 | 89.7 | 86.5 | 77.8 | 68.3 | 168.7 |
| 1250 | 71.2 | 76.3 | 79.6 | 81.8 | 84.3 | 85.1 | 84.8 | 86.8 | 88.8 | 88.9 | 84.1 | 76.2 | 65.7 | 168.4 |
| 1600 | 67.7 | 74.0 | 77.3 | 80.0 | 82.2 | 83.3 | 83.6 | 84.3 | 85.5 | 85.7 | 81.1 | 72.1 | 61.9 | 167.1 |
| 2000 | 64.4 | 71.6 | 75.9 | 78.3 | 81.2 | 82.7 | 81.4 | 82.6 | 83.4 | 83.6 | 77.3 | 68.6 | 57.1 | 166.8 |
| 2500 | 57.6 | 67.6 | 71.8 | 74.9 | 79.8 | 80.7 | 78.0 | 78.6 | 79.1 | 78.5 | 72.5 | 63.4 | 49.8 | 165.7 |
| 3150 | 53.3 | 61.8 | 68.0 | 69.7 | 75.5 | 76.3 | 73.7 | 72.5 | 75.0 | 71.6 | 65.0 | 54.3 | 38.7 | 164.7 |
| 4000 | 45.1 | 53.3 | 61.4 | 65.2 | 67.5 | 68.0 | 66.7 | 66.4 | 66.9 | 64.8 | 55.8 | 40.7 | 18.2 | 164.2 |
| 5000 | 30.1 | 40.9 | 49.6 | 54.8 | 60.8 | 61.3 | 56.8 | 55.6 | 55.9 | 52.3 | 41.5 | 21.5 | 164.0 | |
| 6300 | 5.4 | 20.1 | 30.4 | 37.3 | 42.2 | 43.8 | 41.9 | 38.7 | 39.7 | 31.8 | 17.7 | | 162.2 | |
| 8000 | | | 3.2 | 11.5 | 15.9 | 17.4 | 19.1 | 12.9 | 14.1 | 0.3 | | | 161.6 | |
| 10000 | | | | | | | | | | | | | 162.9 | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GASPL 90.9 92.6 94.5 94.8 96.1 96.9 97.3 99.0 104.2 106.7 108.0 104.7 97.6 183.6
PNL 95.3 98.0 100.5 101.5 104.0 104.9 104.5 105.8 109.5 111.0 110.5 105.1 96.6
PNLT 96.4 98.0 101.0 101.5 105.4 106.1 104.5 105.8 110.1 111.6 111.5 105.1 97.6

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAMB 27.68
LOCATION C41 ANECH CH AERO. RDG. ADH083 PAMB 29.3220 RELHUM 29.00

MODEL TEST POINT 7001 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X70020
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

FREQ

50

63

80

100

125

160

200

250 83.1 85.9 86.4 88.5 87.6 90.0 92.1 94.6 99.3 104.6 109.3 112.7 113.1 146.0
315 84.8 86.1 86.8 89.2 88.5 91.4 91.2 94.4 100.9 106.5 111.1 114.3 112.7 147.2
400 86.3 88.9 88.5 89.2 89.3 91.6 92.3 95.0 101.9 110.0 113.9 115.3 110.8 148.7
500 86.9 87.7 89.7 90.5 90.4 92.7 93.6 96.0 103.8 111.9 115.7 115.7 109.3 149.6
630 87.6 88.8 90.4 90.6 95.0 94.6 95.5 98.4 106.1 112.5 116.3 114.8 105.7 150.0
800 90.3 89.1 91.4 92.7 93.0 95.4 96.8 99.7 108.2 113.0 116.6 113.0 103.7 150.0
1000 92.7 91.7 93.0 93.3 94.4 96.7 97.9 101.3 109.5 113.1 116.0 110.4 101.0 149.6
1250 98.6 100.1 97.4 96.4 96.0 98.1 99.0 102.4 110.0 113.0 115.8 109.5 99.4 149.7
1600 107.4 105.3 103.8 99.8 97.9 99.3 99.9 103.6 111.2 113.1 115.3 107.8 99.6 150.2
2000 105.3 106.4 107.1 105.4 102.2 99.9 100.7 104.2 111.5 114.0 114.9 107.1 99.1 150.7
2500 103.0 103.6 106.1 105.6 106.4 105.3 102.4 104.8 111.5 114.7 114.6 107.1 99.6 151.0
3150 103.6 103.6 103.4 103.2 105.0 107.6 105.5 106.4 112.3 113.8 114.5 108.4 100.4 151.1
4000 102.2 102.8 104.1 102.8 102.4 105.2 106.4 107.3 112.2 113.7 113.9 106.5 98.7 150.8
5000 101.9 101.8 103.3 103.0 103.8 104.7 106.1 108.5 112.7 114.5 113.1 105.7 98.7 151.1
6300 100.5 101.4 103.6 102.6 103.6 105.9 105.4 108.8 113.3 113.6 111.8 104.6 98.0 151.0
8000 100.2 101.1 102.0 102.3 103.6 104.5 105.1 107.9 113.1 112.6 110.3 102.9 97.4 150.7
10000 99.1 100.0 101.7 101.3 103.6 105.8 104.4 107.7 112.1 112.2 109.0 103.0 95.9 150.6
12500 97.5 98.9 99.8 100.7 102.2 103.8 102.8 105.7 109.1 109.9 105.8 101.3 95.7 149.2
16000 96.0 97.6 99.4 100.0 102.1 103.9 101.8 104.7 106.9 108.5 104.0 99.7 94.2 149.3
20000 91.8 95.5 96.7 97.6 101.3 102.4 99.3 101.4 104.3 104.9 101.0 96.4 92.4 148.4
25000 90.6 91.3 94.6 94.4 98.7 99.8 96.6 96.7 101.6 100.2 96.9 92.8 90.7 147.5
31500 87.9 87.8 91.8 93.4 93.9 94.2 92.9 93.7 97.1 98.0 94.5 88.6 85.2 147.0
40000 82.9 82.5 86.5 88.2 91.7 92.4 88.0 88.5 92.5 91.2 89.1 83.2 80.6 146.5
50000 76.2 75.9 78.9 82.8 83.0 84.7 82.7 81.6 87.9 85.5 83.2 78.1 74.3 144.6
63000 69.7 69.2 72.1 76.9 74.5 75.9 76.9 75.6 83.7 78.8 76.2 72.4 68.7 143.9
80000 63.9 62.3 66.5 71.2 68.1 70.0 69.1 68.8 76.9 73.3 70.9 63.8 60.8 144.3

OASPL 113.4 113.6 114.5 113.7 114.5 115.8 115.2 117.7 123.1 125.3 126.6 123.6 118.8 163.4

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TANB 30.02
LOCATION C41 ANECH CH AERO. RDG. ADH999 PAMB 29.5400 RELHUM 42.40

MODEL TEST POINT 7002 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.65 M/SEC (386.0 FPS)
FREE-JET SPEED

ORIGINAL PAGE IS
OF POOR QUALITY

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X70020

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

CASPL

120.2

119.4

117.5

116.0

114.3

112.6

110.9

109.2

107.5

105.8

104.1

102.4

100.7

99.0

97.3

95.6

93.9

90.5 92.0 91.1 91.6 89.1 90.0 90.3 91.3 97.5 102.2 106.4 110.0 110.2 143.4
 315 90.5 92.0 91.1 91.6 89.1 90.0 90.3 91.3 97.5 102.2 106.4 110.0 110.2 143.4
 400 92.2 92.2 91.6 92.4 91.0 91.9 91.5 93.1 102.2 109.9 113.7 115.0 112.0 148.6
 500 93.1 92.6 93.1 92.3 92.2 93.0 92.9 94.4 104.5 110.5 114.6 115.1 110.5 149.0
 630 94.2 93.8 94.4 93.8 96.9 95.0 94.8 96.5 106.8 111.4 115.5 114.7 111.2 149.7
 800 94.9 95.0 95.2 94.0 95.0 95.9 96.0 97.6 108.4 111.6 115.3 113.1 110.9 149.5
 1000 97.7 96.3 96.3 96.1 96.3 97.3 97.1 99.4 108.9 111.5 115.0 112.0 109.2 149.2
 1250 99.0 97.2 97.4 96.5 97.7 98.9 98.3 100.5 114.6 110.4 109.4 149.2
 1600 106.2 105.5 101.5 99.2 100.0 100.2 99.4 101.8 110.7 112.9 114.3 109.7 108.9 149.9
 2000 114.7 111.4 108.7 103.3 104.3 101.0 100.5 102.6 111.0 113.9 114.3 110.0 109.5 152.0
 2500 111.8 111.7 111.3 108.4 109.1 106.8 102.5 103.7 112.5 113.8 115.1 112.4 111.7 153.0
 3150 109.3 109.2 110.8 109.3 108.0 109.5 108.0 105.8 112.8 114.0 114.6 110.3 109.6 152.8
 4000 110.4 109.6 108.6 107.2 105.7 107.6 107.4 107.1 113.5 114.8 113.7 108.2 108.9 152.6
 5000 108.1 108.3 108.9 106.9 107.8 107.7 107.5 108.6 114.2 114.0 112.6 108.2 108.3 152.6
 6300 108.0 108.2 108.9 107.7 107.6 108.9 107.0 109.0 114.3 113.2 111.2 106.8 108.0 152.7
 8000 107.5 107.7 109.1 107.2 107.6 107.5 106.7 108.1 113.5 113.0 110.2 107.1 106.6 152.4
 10000 107.0 107.3 107.3 106.7 107.6 108.8 106.1 108.0 111.2 111.7 108.0 106.8 108.7 152.1
 12500 105.7 105.9 106.8 105.4 106.2 106.8 104.9 106.4 109.8 111.0 107.1 106.2 106.1 151.7
 16000 103.5 104.3 104.4 103.3 106.1 106.9 104.0 105.6 108.2 108.6 106.3 104.1 107.4 151.7
 20000 101.7 102.6 103.6 103.2 105.8 105.4 101.7 102.8 107.0 105.5 102.7 101.5 106.1 151.8
 25000 99.5 102.0 101.9 101.2 103.2 102.8 99.1 98.6 102.1 102.7 99.8 97.4 101.3 151.3
 31500 97.5 97.0 99.0 97.3 97.9 97.2 95.2 94.8 99.5 98.2 96.8 94.1 98.5 150.5
 40000 91.3 90.6 93.7 94.4 96.2 95.4 90.4 90.3 94.6 92.0 90.4 88.7 92.1 150.3
 50000 88.6 87.1 89.7 89.9 87.5 87.7 85.0 83.1 91.1 85.9 84.0 83.6 87.3 149.2
 63000 81.0 79.5 81.1 83.5 79.0 78.9 79.3 76.9 84.8 80.6 78.5 74.3 78.1 147.4
 80000 72.9 71.3 72.8 76.1 72.6 73.0 70.9 69.3 74.9 70.8 68.7 64.5 68.3 146.1
 CASPL 120.2 119.4 119.3 117.5 118.0 118.3 116.4 117.6 123.7 125.0 126.0 124.1 122.6 164.9

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MODEL/FULL SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 386.00 REFRACTION CORRECTION - YES
 INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 5559 TAPB 30.02
 LOCATION C41 ANECH CH AERO. RDG. ADH999 PAMB 29.5400 RELHUM 42.40

MODEL TEST POINT 7002 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.65 M/SEC (386.0 FPS) FREE-JET SPEED

485

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SS 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X70021

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 70.4 | 72.0 | 72.4 | 74.0 | 72.9 | 74.0 | 73.4 | 74.6 | 83.1 | 89.6 | 92.0 | 91.0 | 84.7 | 166.3 |
| 63 | 71.3 | 72.4 | 73.9 | 73.9 | 74.1 | 75.1 | 74.9 | 75.9 | 85.3 | 90.2 | 92.8 | 91.1 | 83.2 | 166.7 |
| 80 | 72.3 | 73.5 | 75.2 | 75.3 | 78.8 | 77.0 | 76.5 | 78.0 | 87.6 | 91.1 | 93.6 | 90.6 | 83.8 | 167.3 |
| 100 | 73.0 | 74.6 | 75.9 | 75.5 | 76.8 | 77.9 | 77.8 | 79.2 | 89.1 | 91.4 | 93.4 | 88.9 | 83.3 | 167.1 |
| 125 | 75.7 | 74.9 | 76.9 | 77.5 | 78.1 | 79.3 | 78.9 | 80.7 | 89.5 | 91.1 | 93.0 | 87.7 | 81.3 | 166.8 |
| 160 | 76.8 | 76.6 | 77.9 | 77.7 | 79.3 | 80.6 | 80.0 | 81.7 | 90.7 | 91.2 | 92.4 | 85.8 | 81.2 | 166.9 |
| 200 | 83.7 | 84.7 | 81.8 | 80.3 | 81.5 | 81.9 | 80.9 | 82.9 | 91.0 | 92.0 | 91.8 | 84.8 | 80.2 | 167.6 |
| 250 | 91.9 | 90.3 | 88.8 | 84.2 | 85.6 | 82.5 | 81.8 | 83.5 | 91.1 | 92.8 | 91.5 | 84.6 | 80.1 | 169.7 |
| 315 | 88.5 | 90.3 | 91.1 | 89.0 | 90.1 | 88.0 | 83.5 | 84.2 | 92.3 | 92.3 | 91.9 | 85.5 | 81.6 | 170.7 |
| 400 | 85.5 | 87.3 | 90.2 | 89.5 | 88.8 | 90.4 | 86.8 | 86.0 | 92.3 | 92.2 | 90.9 | 83.8 | 78.5 | 170.5 |
| 500 | 86.2 | 87.5 | 87.7 | 87.2 | 86.1 | 88.2 | 87.9 | 87.1 | 92.6 | 92.5 | 89.5 | 82.0 | 76.8 | 170.3 |
| 630 | 83.4 | 85.7 | 87.7 | 86.5 | 88.0 | 88.0 | 87.7 | 88.3 | 93.0 | 91.4 | 87.9 | 80.3 | 75.1 | 170.2 |
| 800 | 83.8 | 85.2 | 87.4 | 87.1 | 87.5 | 89.1 | 86.9 | 88.4 | 92.7 | 90.2 | 86.0 | 78.2 | 73.6 | 170.3 |
| 1000 | 81.8 | 84.4 | 87.4 | 86.4 | 87.4 | 87.5 | 86.5 | 87.4 | 91.7 | 89.7 | 84.5 | 77.8 | 71.1 | 170.1 |
| 1250 | 80.9 | 83.6 | 85.3 | 85.8 | 87.3 | 88.6 | 85.8 | 87.1 | 89.2 | 88.0 | 81.9 | 76.8 | 71.8 | 169.8 |
| 1600 | 78.7 | 81.7 | 84.3 | 84.1 | 85.5 | 86.4 | 84.2 | 85.1 | 87.4 | 86.8 | 80.1 | 74.8 | 68.8 | 169.4 |
| 2000 | 75.5 | 79.4 | 81.6 | 82.7 | 85.3 | 86.3 | 83.2 | 84.1 | 85.4 | 83.7 | 77.3 | 71.1 | 65.1 | 169.4 |
| 2500 | 71.9 | 76.5 | 79.9 | 81.0 | 84.5 | 84.3 | 80.3 | 80.6 | 83.3 | 79.4 | 72.9 | 65.7 | 58.8 | 169.5 |
| 3150 | 68.3 | 73.5 | 76.3 | 77.5 | 80.5 | 80.4 | 76.4 | 74.8 | 76.6 | 74.2 | 66.7 | 56.6 | 45.7 | 169.0 |
| 4000 | 58.1 | 63.8 | 69.6 | 70.3 | 72.2 | 71.9 | 69.5 | 67.8 | 70.1 | 65.0 | 57.4 | 44.3 | 28.4 | 168.2 |
| 5000 | 42.2 | 49.8 | 58.1 | 61.9 | 65.5 | 63.2 | 59.7 | 57.9 | 59.0 | 51.2 | 41.2 | 25.3 | 0.2 | 167.9 |
| 6300 | 21.7 | 32.0 | 42.0 | 46.6 | 46.7 | 47.7 | 44.2 | 39.9 | 43.4 | 30.9 | 17.0 | | | 168.9 |
| 8000 | | | 12.1 | 21.1 | 20.1 | 21.1 | 20.4 | 14.4 | 15.7 | 0.8 | | | | 165.1 |
| 10000 | | | | | | | | | | | | | | 163.7 |

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GASPL 96.3 97.2 98.2 97.2 98.1 98.5 96.5 97.2 102.8 103.2 103.0 98.6 92.5 182.5
 PNL 102.2 103.4 105.0 105.0 107.2 107.4 104.8 105.4 109.2 109.2 108.7 106.5 100.6 94.9
 PNL 103.4 104.2 105.8 105.6 108.5 108.6 104.8 105.4 109.9 109.3 109.3 105.5 100.6 96.1

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 30.02
 LOCATION C41 ANECH CH AERG. RDG. ADH999 PAMB 29.5400 RELHUM 42.40

MODEL TEST POINT ACQUSTIC RANGE SIZE FREE-JET SPEED
 7000 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.65 M/SEC (386.0 FPS)

08/30/79 19.452

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 98 40.0 FT. ARCIDENTIFICATION - MODEL FJ-ZER-FMODL X70030
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PAI |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 83.3 | 86.3 | 87.6 | 87.7 | 89.6 | 92.7 | 94.4 | 96.3 | 102.8 | 107.5 | 112.0 | 110.6 | 144.6 | |
| 315 | 84.1 | 86.9 | 87.4 | 89.0 | 89.3 | 91.4 | 91.6 | 94.7 | 100.4 | 104.5 | 108.6 | 113.1 | 111.0 | 145.6 |
| 400 | 85.9 | 88.2 | 88.7 | 89.5 | 89.8 | 91.7 | 92.8 | 94.7 | 102.0 | 107.8 | 110.9 | 114.6 | 111.0 | 147.2 |
| 500 | 86.5 | 89.3 | 90.0 | 89.3 | 91.2 | 93.3 | 94.2 | 96.3 | 102.8 | 108.6 | 111.5 | 115.2 | 111.6 | 147.9 |
| 630 | 87.3 | 90.6 | 90.9 | 91.2 | 96.5 | 94.1 | 95.6 | 98.2 | 104.9 | 109.2 | 111.6 | 114.5 | 111.7 | 148.0 |
| 800 | 90.6 | 90.9 | 91.7 | 92.5 | 93.1 | 95.7 | 96.3 | 99.7 | 106.7 | 109.8 | 110.6 | 114.6 | 111.7 | 148.0 |
| 1000 | 93.0 | 93.3 | 94.0 | 92.6 | 93.9 | 96.3 | 97.2 | 100.8 | 107.3 | 109.9 | 109.7 | 113.7 | 111.1 | 147.7 |
| 1250 | 90.3 | 94.1 | 94.4 | 94.4 | 95.3 | 97.9 | 98.5 | 101.7 | 107.6 | 109.2 | 110.9 | 114.5 | 111.4 | 148.2 |
| 1600 | 92.2 | 92.6 | 93.3 | 94.6 | 95.4 | 96.0 | 98.4 | 102.1 | 108.0 | 109.2 | 110.6 | 115.1 | 111.6 | 148.5 |
| 2000 | 93.1 | 95.2 | 94.7 | 95.2 | 95.0 | 96.9 | 98.6 | 102.4 | 108.6 | 109.8 | 110.7 | 114.2 | 109.7 | 148.2 |
| 2500 | 92.3 | 94.1 | 94.1 | 95.6 | 96.2 | 97.6 | 100.2 | 103.1 | 108.3 | 110.2 | 111.4 | 114.8 | 108.6 | 148.6 |
| 3150 | 93.6 | 95.2 | 94.4 | 95.4 | 96.2 | 98.6 | 99.7 | 103.2 | 108.6 | 109.3 | 111.7 | 113.4 | 106.9 | 148.1 |
| 4000 | 92.7 | 94.3 | 94.3 | 94.6 | 95.8 | 97.9 | 99.6 | 103.5 | 107.9 | 108.4 | 110.6 | 111.0 | 106.5 | 147.1 |
| 5000 | 92.0 | 93.9 | 93.7 | 94.9 | 95.5 | 98.3 | 99.7 | 103.9 | 107.3 | 108.3 | 109.7 | 109.8 | 104.3 | 146.8 |
| 6300 | 90.6 | 94.2 | 94.2 | 94.7 | 95.7 | 98.5 | 99.7 | 102.9 | 106.8 | 107.6 | 108.4 | 109.4 | 104.1 | 146.2 |
| 8000 | 89.9 | 95.1 | 93.9 | 94.6 | 95.9 | 97.8 | 99.1 | 102.2 | 105.6 | 106.2 | 107.3 | 107.7 | 103.2 | 145.6 |
| 10000 | 87.8 | 92.9 | 93.8 | 94.2 | 96.5 | 98.2 | 97.8 | 101.7 | 104.7 | 105.5 | 105.9 | 107.5 | 102.6 | 145.3 |
| 12500 | 85.4 | 90.8 | 92.2 | 93.5 | 95.6 | 97.2 | 97.2 | 99.8 | 102.7 | 103.0 | 103.6 | 104.4 | 100.4 | 144.0 |
| 16000 | 83.6 | 89.6 | 91.0 | 92.3 | 95.2 | 96.7 | 95.4 | 98.3 | 100.5 | 101.2 | 101.3 | 102.3 | 98.6 | 143.6 |
| 20000 | 78.9 | 87.5 | 88.2 | 90.1 | 93.9 | 95.2 | 92.9 | 95.7 | 97.5 | 98.3 | 98.5 | 100.2 | 96.5 | 142.9 |
| 25000 | 78.2 | 83.3 | 86.3 | 86.9 | 91.2 | 92.1 | 90.4 | 94.6 | 93.4 | 94.4 | 95.4 | 94.0 | 94.1 | 141.8 |
| 31500 | 76.7 | 80.6 | 84.5 | 86.4 | 87.2 | 87.7 | 87.4 | 86.9 | 90.6 | 91.9 | 91.7 | 90.7 | 88.0 | 141.3 |
| 40000 | 72.2 | 76.2 | 80.0 | 81.7 | 86.2 | 87.2 | 83.7 | 82.5 | 85.5 | 86.9 | 86.1 | 85.0 | 83.4 | 141.4 |
| 50000 | 65.8 | 69.1 | 73.3 | 75.8 | 79.2 | 80.2 | 80.7 | 77.6 | 82.4 | 80.9 | 80.2 | 80.7 | 77.8 | 140.5 |
| 63000 | 59.5 | 62.6 | 66.0 | 67.9 | 69.5 | 70.2 | 74.2 | 71.3 | 77.4 | 74.4 | 74.1 | 76.4 | 72.2 | 139.2 |
| 80000 | 53.5 | 55.5 | 62.0 | 62.7 | 63.1 | 64.3 | 67.3 | 66.8 | 70.9 | 67.4 | 70.6 | 68.6 | 64.6 | 140.0 |
| GASPL | 103.2 | 105.7 | 105.6 | 106.5 | 107.9 | 109.6 | 110.6 | 114.0 | 119.0 | 120.9 | 122.6 | 125.6 | 122.0 | 160.2 |

ORIGINAL PAGE IS
OF POOR QUALITYTEST DATE 02-21-78 TAPE NO. N294 ALPHA 8859 TAPB 24.80
LOCATION C41 ANECH CH AERO. RDG. ADH092 PAPB 29.3600 RELHUM 41.00MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
7000 7003 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.96 SQ IN) - MODEL 0. M/SEC (0. FPS)

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMDDL X70030

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PHL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

CASPL

103.2

105.7

106.5

107.9

109.8

110.8

114.0

119.0

120.9

122.6

125.6

122.0

160.2

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES TURBULANCE CORRECTION - YES

TEST DATE 02-21-78 TAPE NO. N294 ALPHA SB59 TAMB 24.80
 LOCATION C41 ANECH CH AERO. RDG. ADH092 PAMB 29.3600 RELHUM 41.00

MODEL TEST POINT 7003 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - SIZE 0. FREE-JET SPEED 0. M/SEC (0. FPS)

08/30/79 19.452

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X70031

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 50 | 64.1 | 67.9 | 69.5 | 70.0 | 71.5 | 73.8 | 74.8 | 76.3 | 82.8 | 87.5 | 89.1 | 90.6 | 83.7 | 164.9 |
| 63 | 64.7 | 69.0 | 70.8 | 70.9 | 73.1 | 75.4 | 76.1 | 77.9 | 83.6 | 88.3 | 89.7 | 91.2 | 84.2 | 165.5 |
| 80 | 65.5 | 70.3 | 71.7 | 72.7 | 78.4 | 76.2 | 77.7 | 79.7 | 85.7 | 88.9 | 89.7 | 90.4 | 84.2 | 165.6 |
| 100 | 68.7 | 70.5 | 72.4 | 73.9 | 74.9 | 77.7 | 78.2 | 81.2 | 87.4 | 89.4 | 88.7 | 90.4 | 84.1 | 165.7 |
| 125 | 70.9 | 72.8 | 74.7 | 74.2 | 76.7 | 78.2 | 78.9 | 82.2 | 87.9 | 89.4 | 87.7 | 89.3 | 83.2 | 165.3 |
| 160 | 68.1 | 73.5 | 74.9 | 75.7 | 76.9 | 79.7 | 80.2 | 82.9 | 88.0 | 88.6 | 88.6 | 89.9 | 83.2 | 165.9 |
| 200 | 69.7 | 72.0 | 73.6 | 75.7 | 76.9 | 79.7 | 80.9 | 83.2 | 88.3 | 88.3 | 88.1 | 90.2 | 82.9 | 166.1 |
| 250 | 70.3 | 74.1 | 74.8 | 76.0 | 76.3 | 78.3 | 80.1 | 83.3 | 88.7 | 88.7 | 87.9 | 88.8 | 80.3 | 165.9 |
| 315 | 69.1 | 72.6 | 73.9 | 76.2 | 77.2 | 78.7 | 81.2 | 83.7 | 88.0 | 88.8 | 88.2 | 89.0 | 78.4 | 166.3 |
| 400 | 69.9 | 73.3 | 73.6 | 75.7 | 77.0 | 79.5 | 80.5 | 83.4 | 88.0 | 87.5 | 89.0 | 86.8 | 75.7 | 165.8 |
| 500 | 68.5 | 72.0 | 73.4 | 74.5 | 76.0 | 78.6 | 80.0 | 83.5 | 87.0 | 86.2 | 86.3 | 83.8 | 73.3 | 164.7 |
| 630 | 67.3 | 71.3 | 72.4 | 74.6 | 75.6 | 78.7 | 79.9 | 83.6 | 86.1 | 85.7 | 85.0 | 82.0 | 71.1 | 164.3 |
| 800 | 65.3 | 71.2 | 72.7 | 74.1 | 75.6 | 78.6 | 79.7 | 82.3 | 85.3 | 84.6 | 82.8 | 80.6 | 69.7 | 163.9 |
| 1000 | 64.3 | 71.8 | 72.2 | 73.8 | 75.7 | 77.7 | 78.9 | 81.4 | 84.1 | 82.9 | 81.6 | 78.4 | 67.7 | 163.2 |
| 1250 | 61.7 | 69.3 | 71.6 | 73.3 | 76.2 | 78.0 | 77.5 | 80.7 | 83.7 | 81.9 | 79.8 | 77.4 | 65.7 | 163.0 |
| 1600 | 58.4 | 66.5 | 69.7 | 72.2 | 75.2 | 76.8 | 76.5 | 80.2 | 82.2 | 78.7 | 76.6 | 73.0 | 61.1 | 161.7 |
| 2000 | 55.6 | 64.8 | 68.2 | 70.8 | 74.4 | 76.2 | 74.6 | 76.8 | 77.7 | 76.4 | 73.3 | 69.3 | 56.5 | 161.3 |
| 2500 | 49.1 | 61.4 | 64.6 | 67.9 | 72.5 | 74.1 | 71.5 | 73.5 | 73.9 | 72.3 | 68.7 | 64.4 | 49.3 | 160.5 |
| 3150 | 45.0 | 54.8 | 60.7 | 63.1 | 68.5 | 69.7 | 67.7 | 69.2 | 64.9 | 61.3 | 54.6 | 38.4 | 159.2 | |
| 4000 | 37.3 | 47.6 | 55.1 | 59.4 | 61.5 | 62.5 | 61.7 | 59.9 | 61.2 | 58.6 | 52.3 | 40.9 | 17.9 | 159.0 |
| 5000 | 23.1 | 35.5 | 44.4 | 49.3 | 55.5 | 57.0 | 53.0 | 50.1 | 49.9 | 46.1 | 37.0 | 21.5 | 159.1 | |
| 6300 | 14.1 | 25.6 | 32.6 | 38.4 | 40.2 | 40.2 | 39.9 | 34.4 | 34.7 | 25.8 | 13.2 | 158.1 | 156.8 | |
| 8000 | | | 5.4 | 10.6 | 12.4 | 15.3 | 8.8 | 8.4 | | | | | 157.7 | |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|------|-------|
| CASPL | 79.7 | 83.7 | 85.1 | 86.5 | 86.4 | 90.5 | 91.4 | 94.1 | 98.5 | 99.4 | 99.3 | 100.1 | 92.8 | 177.6 |
| PWL | 84.0 | 89.1 | 91.5 | 93.7 | 96.6 | 98.5 | 98.1 | 100.4 | 103.9 | 103.7 | 103.1 | 102.4 | 93.5 | |
| PWL | 84.0 | 90.1 | 91.5 | 94.3 | 97.8 | 99.7 | 98.8 | 100.9 | 104.5 | 103.7 | 103.1 | 102.4 | 94.5 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-21-78 TAPE NO. N294 IALPHA SB59 TAMB 24.80
LOCATION C41 ANECH CH AERO. RDG. ADH092. PAMB 29.3600 RELHUM 41.00

MODEL TEST POINT 7003 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE FREE-JET SPEED
7003 489 0. M/SEC (0. FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X70040
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PHL

FREQ

50

63

80

100

125

160

200

250 84.3 87.8 87.1 88.1 88.4 91.3 93.7 95.9 100.1 106.4 110.3 114.0 114.1 147.2
315 85.9 86.4 87.6 88.0 90.3 92.7 92.8 95.7 102.2 108.5 111.6 115.6 114.2 148.4
400 87.4 87.7 88.9 88.2 90.1 92.7 93.8 95.7 103.5 111.0 114.9 116.6 113.3 149.9
500 88.0 88.3 90.2 89.8 91.2 94.0 95.4 97.1 104.8 112.6 116.5 117.7 112.3 151.1
630 88.6 89.4 90.9 90.9 94.2 95.1 95.4 99.4 106.6 113.2 117.3 117.8 110.2 151.5
800 92.1 90.2 91.9 93.8 96.4 97.8 100.5 108.7 114.0 117.6 116.6 108.0 151.5
1000 94.2 93.7 95.3 94.3 95.4 98.0 99.1 102.1 110.3 114.1 117.0 115.4 105.6 151.2
1250 98.8 96.9 96.9 96.8 99.1 99.8 102.9 110.3 113.5 117.8 114.8 103.4 151.4
1600 107.4 104.3 102.3 98.8 97.9 100.0 101.1 104.1 111.7 113.9 118.1 113.8 103.1 152.0
2000 106.6 106.9 107.4 105.4 101.7 100.4 101.0 104.4 112.0 114.7 117.7 112.1 102.6 152.2
2500 104.5 104.8 106.6 106.3 106.9 105.0 103.2 105.3 111.7 115.2 117.9 111.6 102.3 152.5
3150 104.6 103.9 103.9 104.4 105.7 108.4 108.0 106.7 112.6 114.8 117.2 110.6 101.6 152.4
4000 103.7 102.8 105.1 103.3 102.9 106.0 106.9 107.1 112.2 114.5 115.6 108.3 99.7 151.6
5000 102.9 102.5 104.3 104.0 104.3 104.9 106.3 108.5 112.7 114.7 114.3 106.9 98.9 151.5
6300 101.4 101.8 103.4 103.3 103.3 106.4 105.6 108.8 113.0 114.0 112.3 105.5 97.5 151.2
8000 101.1 101.3 102.4 102.8 103.6 105.2 105.3 108.4 112.8 112.8 111.5 103.6 96.9 150.9
10000 99.6 100.2 102.4 102.2 103.8 105.5 104.5 108.2 111.5 111.8 109.4 103.2 96.3 150.6
12500 97.4 98.8 100.3 100.8 102.1 104.3 103.0 106.3 109.0 109.8 107.0 101.0 95.2 149.4
16000 96.4 97.5 99.1 100.1 102.1 103.5 102.0 104.1 106.8 108.4 104.9 99.9 93.4 149.2
20000 91.5 95.9 96.6 97.7 101.0 101.8 99.2 101.3 103.9 105.0 102.1 96.8 92.1 148.3
25000 90.0 91.9 94.2 94.3 99.1 99.2 96.6 96.6 101.7 99.8 97.8 93.5 90.3 147.4
31500 88.3 87.5 91.7 93.1 93.6 94.1 93.0 94.1 97.0 98.3 95.8 88.8 85.1 147.1
40000 83.6 83.2 86.4 87.6 91.6 92.0 87.6 88.9 92.2 92.1 90.3 83.1 80.0 146.5
50000 76.6 76.5 78.5 81.2 82.9 84.4 82.3 81.5 86.1 86.1 84.1 78.0 74.2 144.6
63000 70.6 70.1 73.2 74.3 74.9 76.0 77.1 74.9 83.6 79.4 78.3 72.0 68.6 143.9
80000 64.1 63.2 66.4 69.3 68.0 69.9 69.2 68.9 77.1 74.2 74.8 63.5 59.9 144.7

GASPL 114.2 113.8 114.8 114.2 114.7 116.1 115.6 118.0 123.2 125.9 128.3 126.3 120.9 164.3

TEST DATE 02-27-78
LOCATION C41 ANECH CH

TAPE NO. N299
AERO. RDG. ADH100

1 ALPHA SB59
PAMB 29.5400 RELHUM 42.10

MODEL TEST POINT
7000

ACCUSTIC RANGE
12.2 M (40.0 FT) ARC

SIZE
154.7 SQ CM (23.89 SQ IN) - MODEL

FREE-JET SPEED
89.61 M/SEC (294.0 FPS)

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07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
39.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-330-FMODL X70040

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PHL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

OASPL

119.6

118.1

117.4

117.4

116.5

117.9

123.6

125.5

127.6

126.6

123.1

165.2

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 294.00 REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 3559 TAMB 29.12
 LOCATION C41 ANECH CH AERO. RDG. ADH100 PAMB 29.5400 RELHUM 42.10

MODEL TEST POINT 7004 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 89.61 M/SEC (294.0 FPS) FREE-JET SPEED

491

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X70041

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 68.6 | 70.7 | 72.0 | 72.2 | 73.3 | 74.9 | 74.9 | 75.7 | 84.2 | 90.5 | 92.8 | 92.7 | 86.4 | 167.5 |
| 63 | 70.6 | 71.8 | 73.1 | 73.8 | 74.4 | 76.3 | 76.7 | 77.2 | 86.4 | 91.6 | 94.4 | 94.0 | 96.4 | 168.8 |
| 80 | 71.6 | 72.6 | 74.6 | 74.9 | 77.5 | 77.4 | 77.6 | 79.6 | 88.5 | 92.5 | 94.9 | 93.7 | 86.1 | 169.2 |
| 100 | 72.2 | 73.6 | 75.2 | 76.9 | 77.0 | 78.7 | 79.0 | 80.5 | 90.2 | 92.8 | 94.6 | 93.3 | 85.4 | 169.2 |
| 125 | 75.2 | 74.1 | 76.1 | 77.9 | 78.5 | 80.3 | 80.3 | 81.9 | 90.0 | 91.9 | 95.1 | 92.3 | 82.9 | 169.0 |
| 160 | 76.3 | 77.0 | 78.9 | 79.6 | 79.6 | 81.3 | 80.8 | 82.6 | 91.3 | 92.1 | 95.1 | 91.0 | 82.2 | 169.1 |
| 200 | 80.6 | 79.5 | 79.9 | 83.4 | 81.5 | 82.2 | 82.1 | 83.7 | 91.5 | 92.8 | 94.4 | 88.9 | 81.2 | 169.0 |
| 250 | 92.0 | 89.4 | 87.3 | 88.5 | 84.4 | 82.6 | 81.9 | 83.9 | 91.1 | 93.1 | 94.4 | 88.0 | 80.2 | 170.6 |
| 315 | 88.3 | 89.5 | 90.3 | 89.3 | 89.6 | 87.1 | 84.0 | 84.7 | 91.9 | 92.6 | 93.5 | 86.7 | 78.8 | 170.8 |
| 400 | 84.7 | 86.5 | 89.0 | 87.6 | 88.5 | 90.3 | 86.7 | 85.9 | 91.5 | 92.2 | 91.7 | 83.8 | 75.8 | 170.1 |
| 500 | 85.3 | 86.0 | 86.7 | 86.0 | 85.4 | 88.0 | 87.6 | 86.3 | 92.1 | 92.5 | 90.4 | 82.3 | 74.5 | 170.0 |
| 630 | 82.9 | 83.7 | 87.0 | 86.8 | 86.9 | 87.0 | 87.1 | 87.8 | 92.8 | 92.1 | 88.6 | 81.0 | 72.8 | 170.1 |
| 800 | 82.0 | 83.5 | 86.3 | 86.4 | 86.2 | 88.7 | 86.8 | 88.5 | 92.9 | 91.0 | 87.7 | 78.7 | 71.2 | 170.3 |
| 1000 | 80.9 | 83.2 | 85.6 | 86.1 | 86.8 | 88.0 | 87.0 | 88.5 | 91.7 | 90.0 | 85.4 | 77.8 | 69.7 | 170.1 |
| 1250 | 79.9 | 82.2 | 84.5 | 85.5 | 87.1 | 88.3 | 86.3 | 88.2 | 89.2 | 87.9 | 82.7 | 75.0 | 67.4 | 169.6 |
| 1600 | 77.2 | 80.3 | 83.9 | 83.7 | 85.1 | 86.8 | 84.4 | 86.0 | 87.1 | 86.4 | 80.4 | 73.2 | 63.8 | 169.1 |
| 2000 | 73.6 | 77.8 | 80.8 | 82.8 | 84.9 | 86.0 | 83.3 | 83.6 | 84.3 | 82.9 | 77.0 | 68.9 | 59.9 | 168.6 |
| 2500 | 70.4 | 74.9 | 78.4 | 80.5 | 83.6 | 83.7 | 80.0 | 80.2 | 82.8 | 78.3 | 73.1 | 65.3 | 56.5 | 168.7 |
| 3150 | 63.4 | 71.8 | 74.7 | 75.5 | 80.4 | 79.8 | 76.3 | 76.0 | 73.9 | 67.0 | 64.4 | 41.0 | 41.0 | 168.1 |
| 4000 | 55.0 | 62.4 | 67.6 | 70.2 | 71.5 | 71.8 | 69.4 | 68.1 | 68.4 | 64.2 | 56.4 | 41.1 | 23.1 | 167.1 |
| 5000 | 40.7 | 47.9 | 56.8 | 60.2 | 64.9 | 64.9 | 59.1 | 57.7 | 58.3 | 50.7 | 40.5 | 22.3 | | 167.0 |
| 6300 | 19.7 | 30.6 | 40.3 | 43.0 | 46.1 | 47.3 | 39.4 | 39.7 | 42.7 | 30.7 | 17.9 | | | 165.6 |
| 8000 | | | 10.1 | 16.0 | 19.6 | 21.3 | 20.3 | 13.6 | 16.2 | 2.1 | | | | 164.6 |
| 10000 | | | | | | | | | | | | | | 163.1 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GASPL 95.8 95.9 97.2 97.2 97.5 98.3 96.7 97.5 102.8 103.8 104.7 101.6 93.8 182.7
 PNL 101.5 102.2 104.1 104.9 106.5 107.2 105.0 105.6 109.1 108.9 107.9 102.0 93.8
 PNL 102.8 103.0 104.9 105.4 107.9 108.3 105.0 105.6 109.7 108.9 107.9 102.0 95.1

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMS 29.12
 LOCATION C41 ANECH CH AERO. RDG. ADH100 PAMB 29.5400 RELHUM 42.10

MODEL TEST POINT ACQUSTIC RANGE SIZE FREE-JET SPEED
 7000 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 89.61 M/SEC (294.0 FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X70050
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

| | | | | | | | | | | | | | | |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 77.6 | 80.1 | 80.7 | 82.4 | 82.8 | 83.9 | 86.7 | 89.4 | 91.3 | 97.6 | 102.8 | 106.7 | 108.8 | 139.4 |
| 315 | 79.3 | 80.8 | 81.3 | 82.2 | 83.8 | 86.0 | 88.6 | 89.3 | 93.0 | 99.7 | 103.9 | 107.3 | 104.5 | 140.0 |
| 400 | 80.7 | 82.0 | 83.4 | 82.6 | 84.1 | 86.6 | 87.4 | 89.1 | 94.6 | 102.6 | 106.2 | 107.3 | 101.7 | 140.8 |
| 500 | 81.6 | 82.4 | 83.4 | 83.9 | 86.8 | 87.1 | 88.5 | 90.5 | 95.4 | 104.3 | 106.7 | 106.2 | 98.1 | 141.0 |
| 630 | 82.2 | 83.2 | 85.0 | 85.3 | 89.0 | 88.8 | 89.7 | 92.6 | 97.6 | 104.9 | 106.6 | 104.0 | 94.4 | 140.9 |
| 800 | 84.8 | 83.3 | 85.8 | 86.6 | 87.2 | 89.6 | 91.5 | 94.1 | 99.6 | 106.0 | 105.9 | 101.0 | 91.7 | 140.8 |
| 1000 | 85.1 | 84.7 | 87.2 | 87.0 | 88.1 | 90.4 | 92.6 | 96.0 | 101.0 | 106.3 | 105.2 | 97.6 | 90.0 | 140.8 |
| 1250 | 84.7 | 86.5 | 88.0 | 88.6 | 89.2 | 92.0 | 93.2 | 96.6 | 101.3 | 105.7 | 105.0 | 97.0 | 88.9 | 140.7 |
| 1600 | 85.3 | 85.7 | 87.2 | 88.2 | 89.8 | 92.7 | 94.3 | 97.7 | 102.0 | 106.1 | 104.5 | 96.7 | 88.5 | 140.9 |
| 2000 | 85.5 | 85.8 | 87.6 | 88.3 | 89.4 | 92.5 | 94.4 | 97.6 | 102.3 | 106.2 | 103.1 | 95.1 | 88.6 | 140.7 |
| 2500 | 85.7 | 86.4 | 88.5 | 88.5 | 90.3 | 92.9 | 95.3 | 98.5 | 102.2 | 105.3 | 102.5 | 95.0 | 88.7 | 140.5 |
| 3150 | 85.5 | 86.8 | 87.5 | 89.3 | 90.9 | 93.5 | 95.9 | 99.6 | 102.6 | 104.7 | 102.3 | 95.5 | 87.5 | 140.6 |
| 4000 | 86.4 | 86.9 | 87.9 | 89.2 | 90.2 | 93.4 | 95.0 | 98.5 | 102.5 | 103.9 | 101.5 | 95.2 | 86.9 | 140.1 |
| 5000 | 87.1 | 87.2 | 87.7 | 89.4 | 91.0 | 93.8 | 96.2 | 99.7 | 102.2 | 104.6 | 102.2 | 95.4 | 88.6 | 140.7 |
| 6300 | 88.7 | 89.2 | 89.9 | 90.9 | 94.2 | 95.9 | 99.4 | 102.0 | 103.9 | 100.9 | 95.9 | 89.0 | 89.0 | 140.5 |
| 8000 | 89.8 | 90.6 | 89.7 | 90.0 | 91.3 | 93.4 | 95.5 | 98.6 | 101.9 | 103.1 | 101.0 | 96.4 | 89.1 | 140.5 |
| 10000 | 88.2 | 90.2 | 91.1 | 90.6 | 92.4 | 94.3 | 94.7 | 98.3 | 101.1 | 102.9 | 100.4 | 96.4 | 89.2 | 140.6 |
| 12500 | 86.0 | 88.2 | 89.7 | 91.2 | 92.4 | 93.3 | 93.8 | 97.2 | 98.8 | 100.8 | 98.4 | 94.8 | 88.7 | 139.9 |
| 16000 | 84.9 | 87.4 | 88.7 | 89.9 | 92.3 | 93.8 | 93.0 | 96.2 | 97.3 | 99.6 | 96.3 | 93.6 | 88.6 | 140.2 |
| 20000 | 81.0 | 85.6 | 86.4 | 88.1 | 91.8 | 92.4 | 90.3 | 93.2 | 94.6 | 95.9 | 92.8 | 90.9 | 86.1 | 139.3 |
| 25000 | 80.9 | 82.3 | 84.6 | 85.8 | 89.6 | 89.7 | 88.3 | 88.8 | 92.7 | 91.6 | 89.1 | 87.4 | 84.7 | 138.7 |
| 31500 | 79.8 | 79.9 | 83.4 | 85.4 | 85.4 | 85.4 | 85.0 | 85.9 | 89.4 | 89.7 | 86.7 | 82.8 | 79.3 | 138.9 |
| 40000 | 76.1 | 76.4 | 79.6 | 81.7 | 85.6 | 85.6 | 81.7 | 82.5 | 84.4 | 83.8 | 81.2 | 76.9 | 75.3 | 139.7 |
| 50000 | 69.0 | 70.5 | 72.5 | 76.1 | 78.7 | 80.9 | 80.4 | 78.9 | 81.6 | 77.5 | 75.5 | 72.1 | 69.2 | 139.5 |
| 63000 | 62.9 | 62.8 | 65.2 | 67.7 | 68.0 | 69.2 | 71.8 | 70.6 | 75.9 | 71.1 | 68.8 | 66.1 | 63.9 | 136.8 |
| 80000 | 56.9 | 56.0 | 58.7 | 62.3 | 60.7 | 63.1 | 62.1 | 62.6 | 67.4 | 62.9 | 61.8 | 57.6 | 54.7 | 135.8 |
| OASPL | 99.7 | 100.8 | 101.6 | 103.8 | 105.3 | 106.6 | 109.9 | 113.4 | 117.0 | 116.5 | 114.5 | 110.0 | 154.2 | |

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TEST DATE 02-27-78 TAPE NO. N299 ALPHA 8859 TAPS 33.00
LOCATION C41 ANECH CH AERO. RDG. ADH135 PAFB 29.5900 RELNUM 84.10

MODEL TEST POINT 7005 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.65 M/SEC (386.0 FPS) FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X70050

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | | | | | | | | | | | | | | |
| 315 | 85.0 | 86.2 | 85.4 | 85.6 | 84.3 | 83.9 | 84.8 | 84.9 | 89.7 | 95.5 | 99.1 | 103.0 | 101.9 | 136.1 |
| 400 | 85.0 | 86.2 | 85.4 | 85.6 | 85.5 | 86.2 | 85.2 | 85.6 | 92.7 | 100.3 | 103.5 | 105.5 | 102.4 | 139.0 |
| 500 | 86.6 | 87.0 | 86.0 | 85.5 | 85.8 | 87.0 | 86.6 | 87.4 | 93.4 | 101.9 | 104.4 | 105.3 | 100.8 | 139.4 |
| 630 | 87.7 | 87.9 | 88.0 | 86.0 | 88.6 | 87.4 | 87.6 | 88.4 | 95.5 | 102.4 | 104.3 | 103.8 | 98.9 | 139.2 |
| 800 | 89.0 | 88.5 | 88.2 | 87.2 | 87.4 | 89.1 | 88.7 | 90.4 | 97.7 | 103.6 | 103.8 | 101.6 | 98.3 | 139.6 |
| 1000 | 92.3 | 91.6 | 91.5 | 89.8 | 89.1 | 90.0 | 90.5 | 91.9 | 99.4 | 104.3 | 103.6 | 99.1 | 98.5 | 139.6 |
| 1250 | 92.0 | 89.4 | 90.6 | 90.2 | 90.1 | 91.0 | 91.7 | 93.8 | 99.9 | 103.8 | 103.5 | 98.4 | 97.0 | 139.5 |
| 1600 | 92.5 | 90.9 | 92.1 | 90.5 | 91.4 | 92.8 | 92.5 | 94.5 | 100.8 | 104.4 | 103.2 | 97.4 | 96.9 | 139.9 |
| 2000 | 92.1 | 92.8 | 93.0 | 92.2 | 92.2 | 93.6 | 93.8 | 95.9 | 101.4 | 104.8 | 102.1 | 97.1 | 97.3 | 140.2 |
| 2500 | 93.7 | 91.9 | 92.2 | 91.9 | 91.9 | 93.7 | 94.1 | 96.2 | 101.7 | 104.4 | 102.0 | 97.4 | 97.9 | 140.1 |
| 3150 | 92.9 | 92.1 | 92.9 | 92.1 | 93.1 | 94.4 | 95.4 | 97.2 | 102.7 | 104.2 | 102.3 | 98.5 | 97.3 | 140.6 |
| 4000 | 93.0 | 92.8 | 93.7 | 92.5 | 93.9 | 95.4 | 96.3 | 98.7 | 103.0 | 104.1 | 102.1 | 98.6 | 97.1 | 141.0 |
| 5000 | 92.8 | 93.1 | 92.9 | 93.5 | 93.7 | 95.8 | 96.0 | 99.2 | 103.0 | 105.0 | 102.9 | 98.9 | 98.6 | 141.5 |
| 6300 | 93.6 | 93.4 | 93.4 | 93.6 | 95.0 | 96.8 | 97.7 | 99.8 | 103.1 | 104.5 | 101.9 | 100.0 | 100.3 | 141.8 |
| 8000 | 94.2 | 93.7 | 93.3 | 94.1 | 94.8 | 97.2 | 97.6 | 99.6 | 103.1 | 103.9 | 102.4 | 100.9 | 100.9 | 142.1 |
| 10000 | 95.8 | 95.5 | 94.7 | 94.4 | 95.3 | 96.4 | 97.1 | 98.9 | 102.7 | 104.1 | 102.2 | 101.4 | 101.5 | 142.5 |
| 12500 | 96.7 | 96.7 | 95.0 | 94.4 | 96.4 | 97.3 | 96.5 | 98.7 | 101.2 | 103.0 | 101.1 | 100.9 | 102.0 | 142.6 |
| 16000 | 94.8 | 96.1 | 96.2 | 94.8 | 96.4 | 96.3 | 95.9 | 98.0 | 100.9 | 103.0 | 100.3 | 100.9 | 102.8 | 143.2 |
| 20000 | 92.0 | 93.6 | 94.2 | 94.8 | 96.8 | 96.8 | 95.3 | 97.6 | 99.0 | 100.1 | 97.4 | 98.5 | 100.4 | 142.9 |
| 25000 | 93.2 | 94.5 | 94.5 | 94.2 | 96.4 | 95.4 | 92.8 | 95.0 | 95.7 | 94.1 | 92.0 | 93.2 | 97.2 | 142.3 |
| 31500 | 98.7 | 92.1 | 91.5 | 91.8 | 94.1 | 92.7 | 89.7 | 88.9 | 95.1 | 95.2 | 92.9 | 92.1 | 95.5 | 142.7 |
| 40000 | 87.9 | 88.0 | 88.9 | 88.7 | 89.3 | 88.4 | 87.4 | 87.5 | 89.7 | 88.7 | 86.4 | 84.9 | 89.9 | 141.5 |
| 50000 | 83.2 | 82.6 | 85.3 | 86.4 | 90.2 | 88.6 | 83.4 | 83.0 | 88.1 | 84.1 | 82.6 | 82.0 | 86.7 | 143.2 |
| 63000 | 81.8 | 80.9 | 82.8 | 83.4 | 83.2 | 83.9 | 82.3 | 80.0 | 84.3 | 79.3 | 77.4 | 77.5 | 81.9 | 143.7 |
| 80000 | 73.7 | 74.1 | 74.7 | 76.8 | 72.0 | 72.2 | 73.9 | 72.6 | 77.2 | 72.7 | 72.2 | 71.2 | 75.2 | 141.0 |
| 100000 | 63.5 | 62.7 | 64.3 | 65.9 | 64.7 | 66.1 | 64.6 | 64.5 | 67.4 | 62.9 | 62.4 | 61.3 | 65.4 | 138.3 |
| GASPL | 105.9 | 106.0 | 105.9 | 105.6 | 107.2 | 107.6 | 107.5 | 109.5 | 113.7 | 116.3 | 115.3 | 114.0 | 113.0 | 155.4 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 386.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | SB59 | TAMB | 33.00 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH135 | PAMB. | 29.5900 | RELHUM | 54.10 |

| MODEL | TEST POINT | ACUSTIC RANGE | 12.2 M (40.0 FT) | ARC | 154.7 SQ CM (23.99 SQ IN) | MODEL | 117.65 M/SEC (386.0 FPS) |
|-------|------------|---------------|-------------------|-----|----------------------------|-------|---------------------------|
| 7000 | 7005 | | | | | | |

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X70051

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 50 | 64.9 | 66.7 | 68.9 | 67.0 | 67.8 | 69.1 | 68.6 | 68.9 | 74.2 | 81.6 | 82.6 | 81.4 | 73.5 | 157.1 |
| 63 | 65.9 | 67.6 | 68.8 | 67.5 | 70.6 | 69.5 | 69.5 | 69.9 | 76.3 | 82.1 | 82.5 | 79.7 | 71.5 | 156.8 |
| 80 | 67.1 | 68.2 | 69.0 | 68.7 | 79.3 | 71.2 | 70.6 | 71.9 | 78.5 | 83.3 | 82.0 | 77.5 | 70.9 | 157.3 |
| 100 | 70.3 | 71.2 | 72.2 | 71.2 | 71.0 | 72.0 | 72.3 | 73.3 | 80.1 | 83.9 | 81.7 | 74.9 | 70.9 | 157.3 |
| 125 | 69.9 | 68.9 | 71.2 | 71.6 | 71.9 | 72.9 | 73.5 | 75.2 | 80.5 | 83.3 | 81.4 | 74.0 | 69.2 | 157.1 |
| 160 | 70.2 | 70.2 | 72.6 | 71.7 | 73.0 | 74.6 | 74.1 | 75.6 | 81.2 | 83.8 | 81.0 | 72.8 | 68.7 | 157.6 |
| 200 | 69.6 | 71.9 | 73.3 | 73.2 | 73.7 | 75.3 | 75.3 | 77.0 | 81.7 | 84.0 | 79.6 | 72.1 | 68.6 | 157.8 |
| 250 | 70.9 | 70.8 | 72.3 | 72.8 | 73.2 | 75.2 | 75.4 | 77.1 | 81.7 | 83.3 | 79.1 | 72.0 | 68.6 | 157.8 |
| 315 | 69.6 | 70.6 | 72.7 | 72.7 | 74.1 | 75.6 | 76.4 | 77.6 | 82.5 | 82.6 | 79.1 | 72.6 | 67.1 | 158.3 |
| 400 | 69.3 | 70.9 | 73.1 | 72.7 | 74.7 | 76.2 | 77.1 | 79.0 | 82.4 | 82.2 | 78.3 | 72.1 | 65.9 | 158.6 |
| 500 | 68.5 | 70.9 | 72.0 | 73.4 | 74.2 | 76.4 | 76.5 | 79.2 | 82.1 | 82.7 | 78.7 | 71.7 | 66.7 | 159.2 |
| 630 | 68.9 | 70.7 | 72.2 | 73.3 | 75.1 | 77.2 | 77.9 | 79.4 | 81.9 | 81.9 | 77.2 | 72.2 | 67.1 | 159.5 |
| 800 | 69.0 | 70.6 | 71.8 | 73.5 | 74.8 | 77.3 | 77.5 | 79.0 | 81.6 | 80.9 | 77.2 | 72.4 | 66.6 | 159.8 |
| 1000 | 70.1 | 72.2 | 72.9 | 73.7 | 75.1 | 76.4 | 76.9 | 78.1 | 80.9 | 80.8 | 76.5 | 72.2 | 66.0 | 160.1 |
| 1250 | 70.5 | 73.1 | 73.0 | 73.5 | 76.1 | 77.2 | 78.1 | 77.8 | 79.2 | 79.3 | 76.0 | 70.8 | 65.0 | 160.2 |
| 1600 | 67.7 | 71.8 | 73.7 | 73.5 | 75.8 | 75.9 | 75.2 | 76.7 | 78.5 | 78.8 | 73.3 | 69.5 | 63.5 | 160.8 |
| 2000 | 64.0 | 68.8 | 71.4 | 73.3 | 76.0 | 76.2 | 74.5 | 76.0 | 76.2 | 75.2 | 69.4 | 65.4 | 58.1 | 160.5 |
| 2500 | 63.4 | 68.4 | 70.8 | 72.0 | 75.0 | 74.3 | 71.4 | 72.6 | 72.0 | 68.0 | 62.2 | 57.3 | 50.0 | 159.9 |
| 3150 | 55.6 | 63.6 | 66.0 | 68.1 | 71.4 | 70.3 | 67.0 | 65.2 | 69.5 | 66.7 | 59.7 | 51.3 | 39.9 | 150.3 |
| 4000 | 48.5 | 54.8 | 59.6 | 61.7 | 63.6 | 63.1 | 61.7 | 60.5 | 60.3 | 55.5 | 47.0 | 35.1 | 19.8 | 159.1 |
| 5000 | 34.0 | 41.8 | 49.7 | 53.9 | 59.5 | 58.5 | 52.7 | 50.6 | 52.5 | 43.3 | 33.4 | 18.5 | 160.9 | |
| 6300 | 14.8 | 25.9 | 35.1 | 40.2 | 42.5 | 43.9 | 41.5 | 36.8 | 36.6 | 24.3 | 10.4 | 161.3 | 158.6 | |
| 8000 | | | 5.7 | 14.4 | 13.1 | 14.4 | 15.0 | 10.1 | 8.2 | | | | 156.0 | |

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GASPL 81.4 83.1 84.6 85.0 87.3 87.8 87.7 89.3 92.9 94.5 91.9 87.2 81.0 172.9
 PNL 88.1 91.6 93.7 94.7 97.2 97.3 96.2 97.5 99.7 100.0 95.6 90.3 84.1
 PMLT 88.1 91.6 94.5 95.3 98.6 98.4 97.0 98.2 100.4 101.1 96.7 91.4 85.3

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 33.00
 LOCATION C41 ANECH CH AERG. RDG. ADH135 PAMB 29.5900 RELHUM 54.10

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
 7000 7006 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.65 M/SEC (386.0 FPS)

08/30/79 19.432

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X70060
 BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 85.0 | 89.6 | 88.3 | 89.1 | 89.7 | 92.1 | 94.0 | 96.4 | 101.6 | 106.6 | 109.5 | 113.2 | 112.4 | 146.4 |
| 315 | 86.4 | 86.9 | 89.4 | 90.0 | 91.8 | 93.4 | 94.3 | 97.0 | 104.4 | 109.0 | 111.4 | 114.6 | 113.0 | 147.9 |
| 400 | 88.2 | 90.7 | 90.7 | 91.6 | 94.0 | 94.0 | 94.8 | 97.7 | 106.0 | 113.0 | 114.4 | 116.6 | 113.5 | 150.3 |
| 500 | 88.7 | 91.8 | 92.8 | 92.3 | 92.7 | 95.3 | 96.4 | 98.8 | 107.3 | 114.6 | 115.7 | 116.7 | 113.6 | 151.2 |
| 630 | 89.8 | 92.6 | 93.2 | 94.8 | 96.6 | 97.3 | 101.2 | 108.9 | 115.5 | 116.6 | 117.5 | 114.2 | 152.1 | |
| 800 | 94.4 | 93.4 | 94.2 | 94.7 | 95.1 | 97.7 | 98.3 | 102.2 | 110.2 | 115.8 | 117.1 | 118.1 | 114.5 | 152.7 |
| 1000 | 97.7 | 98.5 | 98.0 | 98.6 | 98.7 | 99.0 | 99.9 | 103.6 | 111.8 | 115.1 | 116.7 | 117.4 | 114.3 | 152.5 |
| 1250 | 93.8 | 97.8 | 97.4 | 97.9 | 98.3 | 100.6 | 101.0 | 104.4 | 111.8 | 115.3 | 117.4 | 118.0 | 113.7 | 152.8 |
| 1600 | 95.4 | 95.6 | 95.8 | 96.6 | 97.2 | 100.1 | 100.9 | 105.1 | 113.0 | 115.7 | 117.1 | 117.3 | 112.8 | 152.8 |
| 2000 | 96.1 | 98.2 | 97.4 | 96.7 | 97.0 | 99.1 | 101.0 | 104.5 | 113.1 | 116.5 | 118.5 | 114.9 | 110.9 | 152.4 |
| 2500 | 94.6 | 97.6 | 97.1 | 96.9 | 98.0 | 100.1 | 101.5 | 105.4 | 113.0 | 116.2 | 115.7 | 113.6 | 108.6 | 151.9 |
| 3150 | 96.6 | 99.2 | 97.2 | 97.2 | 98.0 | 100.6 | 101.7 | 106.4 | 113.1 | 115.3 | 114.2 | 112.6 | 107.9 | 151.2 |
| 4000 | 96.7 | 99.5 | 97.8 | 97.0 | 97.6 | 98.9 | 101.8 | 105.8 | 111.9 | 114.2 | 112.8 | 110.7 | 106.9 | 150.1 |
| 5000 | 95.5 | 98.9 | 98.9 | 98.4 | 98.7 | 100.5 | 101.8 | 108.1 | 111.0 | 113.3 | 112.4 | 110.6 | 105.3 | 149.8 |
| 6300 | 94.5 | 98.9 | 95.1 | 99.1 | 99.9 | 101.5 | 102.2 | 104.9 | 110.0 | 112.8 | 111.1 | 110.1 | 106.0 | 149.3 |
| 8000 | 94.1 | 98.3 | 98.6 | 99.2 | 100.3 | 102.2 | 102.0 | 104.6 | 109.8 | 111.2 | 110.7 | 108.6 | 104.4 | 149.0 |
| 10000 | 91.7 | 96.6 | 98.3 | 98.9 | 100.5 | 103.1 | 102.0 | 104.3 | 108.4 | 110.7 | 109.1 | 107.4 | 103.8 | 148.7 |
| 12500 | 88.3 | 94.9 | 96.1 | 97.4 | 98.7 | 101.1 | 101.6 | 102.7 | 106.1 | 107.8 | 107.5 | 105.9 | 102.1 | 147.6 |
| 16000 | 86.3 | 93.5 | 95.1 | 96.4 | 99.6 | 101.4 | 99.8 | 101.4 | 103.9 | 106.6 | 105.7 | 104.8 | 100.5 | 147.6 |
| 20000 | 81.8 | 90.4 | 91.9 | 94.5 | 98.3 | 99.4 | 97.0 | 98.6 | 101.2 | 103.4 | 103.4 | 100.9 | 98.2 | 146.7 |
| 25000 | 80.1 | 88.2 | 89.2 | 90.3 | 95.1 | 96.5 | 94.3 | 93.8 | 98.4 | 99.2 | 99.8 | 98.6 | 96.4 | 145.6 |
| 31500 | 78.4 | 82.9 | 86.9 | 89.3 | 90.1 | 91.1 | 90.6 | 90.8 | 94.2 | 97.2 | 94.6 | 91.1 | 89.2 | 144.8 |
| 40000 | 73.9 | 78.1 | 81.6 | 83.8 | 88.1 | 89.1 | 85.6 | 86.1 | 89.1 | 92.3 | 89.5 | 85.9 | 84.6 | 144.4 |
| 50000 | 68.7 | 71.0 | 74.0 | 76.9 | 79.6 | 80.9 | 81.3 | 79.8 | 85.0 | 86.7 | 84.1 | 81.3 | 78.5 | 142.9 |
| 63000 | 61.4 | 64.5 | 67.6 | 70.3 | 71.7 | 72.3 | 76.3 | 74.2 | 80.8 | 80.8 | 77.5 | 75.0 | 72.9 | 142.4 |
| 80000 | 56.1 | 58.4 | 62.1 | 65.6 | 66.0 | 66.7 | 70.7 | 70.4 | 74.5 | 75.3 | 72.8 | 69.5 | 65.7 | 143.7 |
| OASPL | 106.6 | 109.5 | 109.4 | 109.6 | 110.8 | 112.9 | 113.3 | 116.5 | 123.1 | 126.7 | 127.2 | 127.5 | 124.0 | 163.9 |

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TEST DATE 02-21-78 TAPE NO. N294 ALPHA SB59 TAMB 24.26
 LOCATION C41 ANECH CH AERO. RDG. ADH098 PAMB 29.3700 RELHUM 39.00

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

08/30/79 19.452

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X70060

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 85.0 | 89.6 | 88.3 | 89.1 | 89.7 | 92.1 | 94.0 | 96.4 | 101.6 | 106.6 | 108.5 | 113.2 | 112.4 | 148.4 |
| 315 | 88.4 | 88.3 | 89.4 | 90.0 | 91.6 | 93.4 | 94.3 | 97.0 | 104.4 | 109.0 | 111.4 | 114.6 | 113.0 | 147.9 |
| 400 | 88.2 | 90.7 | 90.7 | 91.6 | 92.3 | 94.0 | 94.8 | 97.7 | 106.0 | 113.0 | 114.4 | 116.6 | 113.5 | 150.3 |
| 500 | 88.7 | 91.8 | 92.6 | 92.3 | 92.7 | 95.3 | 96.4 | 98.6 | 107.3 | 114.6 | 115.7 | 116.7 | 113.6 | 151.2 |
| 630 | 89.8 | 92.6 | 93.2 | 93.2 | 94.8 | 96.6 | 97.3 | 101.2 | 108.9 | 115.5 | 116.6 | 117.5 | 114.2 | 152.1 |
| 800 | 94.4 | 93.4 | 94.2 | 94.7 | 95.1 | 97.7 | 98.3 | 102.2 | 110.2 | 115.8 | 117.1 | 118.1 | 114.8 | 152.7 |
| 1000 | 97.7 | 96.5 | 98.0 | 96.8 | 96.7 | 98.0 | 99.9 | 103.6 | 111.8 | 115.1 | 116.7 | 117.4 | 114.3 | 152.5 |
| 1250 | 93.6 | 97.6 | 97.4 | 97.9 | 98.3 | 100.6 | 101.0 | 104.4 | 111.8 | 115.3 | 117.4 | 118.0 | 113.7 | 152.8 |
| 1600 | 95.4 | 95.6 | 95.8 | 96.6 | 97.2 | 100.1 | 100.9 | 105.1 | 113.0 | 115.7 | 117.1 | 117.3 | 112.8 | 152.6 |
| 2000 | 96.1 | 98.2 | 97.4 | 96.7 | 97.0 | 99.1 | 101.0 | 104.5 | 113.1 | 116.6 | 116.6 | 114.9 | 110.9 | 152.4 |
| 2500 | 94.6 | 97.6 | 97.1 | 96.9 | 98.0 | 100.1 | 101.5 | 105.4 | 113.0 | 116.2 | 115.7 | 113.6 | 108.6 | 151.9 |
| 3150 | 96.6 | 99.2 | 97.2 | 97.2 | 98.0 | 100.6 | 101.7 | 106.4 | 113.1 | 115.3 | 114.2 | 112.8 | 107.9 | 151.2 |
| 4000 | 96.7 | 99.5 | 97.6 | 97.0 | 97.6 | 99.9 | 101.6 | 105.8 | 111.9 | 114.2 | 112.8 | 110.7 | 105.9 | 150.1 |
| 5000 | 95.5 | 98.9 | 98.9 | 98.4 | 98.7 | 100.5 | 101.9 | 106.1 | 111.0 | 113.3 | 112.4 | 110.6 | 105.3 | 149.8 |
| 6300 | 94.5 | 98.9 | 99.1 | 99.1 | 99.9 | 101.5 | 102.2 | 104.9 | 110.0 | 112.8 | 111.1 | 110.1 | 105.0 | 149.3 |
| 8000 | 94.1 | 98.3 | 98.6 | 99.2 | 100.3 | 102.2 | 102.0 | 104.6 | 109.8 | 111.2 | 110.7 | 108.6 | 104.4 | 149.0 |
| 10000 | 91.7 | 96.6 | 98.3 | 98.9 | 100.5 | 103.1 | 102.0 | 104.3 | 108.4 | 110.7 | 109.1 | 107.4 | 103.8 | 148.7 |
| 12500 | 88.3 | 94.9 | 96.1 | 97.4 | 99.7 | 101.1 | 101.6 | 102.7 | 106.1 | 107.8 | 107.5 | 105.9 | 102.1 | 147.6 |
| 16000 | 86.3 | 93.5 | 95.1 | 96.4 | 99.6 | 101.4 | 99.8 | 101.4 | 103.9 | 106.6 | 105.7 | 104.8 | 100.5 | 147.6 |
| 20000 | 81.8 | 90.4 | 91.9 | 94.5 | 98.3 | 99.4 | 97.0 | 98.6 | 101.2 | 103.4 | 103.4 | 100.9 | 98.2 | 146.7 |
| 25000 | 80.1 | 86.2 | 89.2 | 90.3 | 95.1 | 96.5 | 94.3 | 93.8 | 98.4 | 99.2 | 99.8 | 96.6 | 96.4 | 145.6 |
| 31500 | 78.4 | 82.9 | 86.9 | 89.3 | 90.1 | 91.1 | 90.6 | 90.8 | 94.2 | 97.2 | 94.6 | 91.1 | 89.2 | 144.8 |
| 40000 | 73.9 | 78.1 | 81.6 | 83.8 | 88.1 | 89.1 | 85.6 | 86.1 | 89.1 | 92.3 | 89.5 | 85.9 | 84.6 | 144.4 |
| 50000 | 68.7 | 71.0 | 74.0 | 76.9 | 79.6 | 80.9 | 81.3 | 79.8 | 85.0 | 86.7 | 84.1 | 81.3 | 78.5 | 142.9 |
| 63000 | 61.4 | 64.5 | 67.6 | 70.3 | 71.7 | 72.3 | 76.3 | 74.2 | 80.8 | 80.8 | 77.5 | 76.0 | 72.9 | 142.4 |
| 80000 | 56.1 | 58.4 | 62.1 | 65.6 | 68.0 | 66.7 | 70.7 | 70.4 | 74.6 | 75.3 | 72.8 | 69.5 | 65.7 | 143.7 |
| CASPL | 106.6 | 109.5 | 109.4 | 109.6 | 110.6 | 112.9 | 113.3 | 116.5 | 123.1 | 126.7 | 127.2 | 127.5 | 124.0 | 163.9 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 0. | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|-------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 02-21-78 | TAPE NO. | N294 | IALPHA | SB69 | TAMB | 24.28 |
|-----------|--------------|------------|--------|--------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH098 | PAMB | 29.3700 | RELHUM | 39.00 |

| MODEL | TEST POINT | ACOUSTIC RANGE | ARC | 154.7 SQ CM (23.99 SQ IN) | MODEL | 0. | FREE-JET SPEED |
|-------|------------|-------------------|-----|----------------------------|-------|----|-----------------|
| 7000 | 7006 | 12.2 M (40.0 FT) | ARC | 154.7 SQ CM (23.99 SQ IN) | MODEL | 0. | M/SEC (O. FPS) |

08/30/79 19.452

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 35 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X70061

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 66.4 | 70.4 | 71.5 | 72.3 | 73.5 | 76.0 | 76.8 | 79.3 | 86.8 | 92.8 | 92.6 | 92.6 | 86.2 | 168.0 |
| 63 | 66.9 | 71.5 | 73.6 | 73.9 | 74.6 | 77.4 | 78.4 | 80.4 | 88.1 | 94.3 | 93.9 | 92.7 | 86.2 | 168.9 |
| 80 | 68.0 | 72.3 | 73.9 | 74.7 | 76.7 | 78.7 | 79.2 | 82.7 | 89.7 | 95.2 | 94.7 | 93.4 | 86.7 | 169.8 |
| 100 | 72.4 | 73.0 | 74.9 | 76.2 | 76.9 | 79.7 | 80.2 | 83.7 | 90.9 | 95.4 | 95.2 | 93.9 | 86.8 | 170.3 |
| 125 | 75.7 | 78.1 | 78.7 | 78.2 | 78.4 | 80.9 | 81.7 | 84.9 | 92.4 | 94.6 | 94.7 | 93.1 | 86.5 | 170.1 |
| 160 | 71.3 | 77.0 | 77.9 | 79.2 | 79.9 | 82.4 | 82.7 | 85.7 | 92.3 | 94.6 | 95.1 | 93.4 | 85.5 | 170.5 |
| 200 | 73.0 | 74.7 | 76.1 | 77.7 | 78.7 | 81.7 | 82.4 | 86.2 | 93.3 | 94.8 | 94.6 | 92.4 | 84.1 | 170.4 |
| 250 | 73.3 | 77.1 | 77.5 | 77.6 | 78.3 | 80.6 | 82.3 | 85.3 | 93.2 | 95.4 | 93.7 | 89.6 | 81.6 | 170.0 |
| 315 | 71.3 | 76.2 | 76.9 | 77.5 | 79.0 | 81.3 | 82.5 | 86.0 | 92.8 | 94.8 | 92.4 | 87.7 | 78.4 | 169.5 |
| 400 | 72.9 | 77.3 | 76.6 | 77.4 | 78.7 | 81.5 | 82.5 | 86.7 | 92.5 | 93.4 | 90.5 | 86.1 | 76.7 | 168.9 |
| 500 | 72.4 | 77.2 | 76.9 | 77.0 | 78.0 | 80.5 | 82.3 | 85.7 | 91.0 | 91.9 | 88.6 | 83.5 | 73.8 | 167.8 |
| 630 | 70.8 | 76.2 | 77.6 | 78.0 | 78.9 | 80.9 | 82.1 | 85.8 | 89.8 | 90.7 | 87.7 | 82.7 | 72.1 | 167.4 |
| 800 | 69.3 | 75.9 | 77.6 | 78.5 | 79.8 | 81.6 | 82.1 | 84.3 | 88.5 | 89.8 | 86.9 | 81.5 | 70.7 | 167.0 |
| 1000 | 68.5 | 74.9 | 76.9 | 78.5 | 80.1 | 82.2 | 81.8 | 83.8 | 88.0 | 87.8 | 85.1 | 79.4 | 68.9 | 166.6 |
| 1250 | 65.6 | 72.9 | 76.3 | 77.9 | 80.1 | 83.0 | 81.7 | 83.4 | 86.4 | 87.0 | 82.9 | 77.3 | 66.8 | 166.4 |
| 1600 | 61.3 | 70.7 | 73.6 | 76.2 | 79.1 | 80.7 | 80.9 | 81.4 | 83.6 | 83.6 | 80.5 | 74.4 | 62.8 | 165.2 |
| 2000 | 58.3 | 68.7 | 72.3 | 74.9 | 78.9 | 80.8 | 79.0 | 79.9 | 81.1 | 81.8 | 77.7 | 71.7 | 58.2 | 165.3 |
| 2500 | 52.0 | 64.3 | 68.2 | 72.3 | 76.9 | 78.3 | 75.7 | 76.4 | 77.5 | 77.4 | 73.6 | 65.0 | 50.9 | 164.3 |
| 3150 | 46.9 | 57.7 | 63.6 | 66.5 | 72.4 | 74.1 | 71.6 | 70.1 | 72.9 | 70.7 | 66.7 | 55.7 | 40.8 | 163.2 |
| 4000 | 39.0 | 49.7 | 57.5 | 62.3 | 64.4 | 65.9 | 64.9 | 63.8 | 64.8 | 64.0 | 55.2 | 41.3 | 19.1 | 162.5 |
| 5000 | 24.7 | 37.3 | 46.0 | 51.4 | 57.4 | 58.9 | 54.9 | 53.7 | 53.5 | 51.5 | 40.4 | 22.4 | | 162.0 |
| 6300 | | 16.0 | 26.3 | 33.7 | 38.8 | 40.9 | 40.5 | 36.6 | 37.3 | 31.7 | 17.1 | | | 160.5 |
| 8000 | | | | 7.8 | 12.7 | 14.5 | 17.4 | 11.7 | 11.8 | 0.9 | | | | 160.1 |
| 10000 | | | | | | | | | | | | | | 161.4 |

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OASPL 83.2 87.5 88.6 89.5 91.1 93.4 93.8 96.7 102.8 105.3 104.4 102.3 95.0 181.4
PNL 87.3 92.9 95.3 97.2 100.1 102.2 101.5 103.2 108.1 109.5 107.3 103.9 95.1
PNLT 87.9 93.9 95.3 97.2 101.4 103.4 101.5 103.2 108.6 110.2 107.3 103.9 96.4

DIAMETER RATIO 7.620 FREQUENCY SHIFT -9

TEST DATE 02-21-78 TAPE NO. N294 ALPHA 8859 TAMS 24.25
LOCATION C41 ANECH CH. AERO. RD9. ADH098 PAMB 29.3700 RELHUM 39.00

MODEL TEST POINT ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. FREE-JET SPEED
7006 M/SEC (0. FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 98 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X70070
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

| | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| FREQ | | | | | | | | | | | | | | |
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 81.2 | 84.6 | 85.1 | 86.4 | 88.3 | 89.9 | 92.1 | 95.8 | 102.1 | 106.5 | 110.5 | 109.4 | 143.2 | |
| 315 | 82.9 | 84.4 | 85.1 | 87.3 | 89.4 | 90.8 | 92.5 | 97.9 | 105.0 | 108.9 | 111.6 | 109.2 | 144.6 | |
| 400 | 84.9 | 85.9 | 87.1 | 86.0 | 87.8 | 90.2 | 91.8 | 93.7 | 98.9 | 109.0 | 112.2 | 112.8 | 108.0 | 146.7 |
| 500 | 85.2 | 86.0 | 86.8 | 87.6 | 89.9 | 91.5 | 92.7 | 94.8 | 100.0 | 111.1 | 113.7 | 112.9 | 105.3 | 147.5 |
| 630 | 85.6 | 87.1 | 88.2 | 87.8 | 92.9 | 94.3 | 97.2 | 102.4 | 111.2 | 114.5 | 112.5 | 102.7 | 148.1 | |
| 800 | 86.6 | 87.9 | 90.2 | 91.5 | 93.6 | 95.5 | 98.4 | 104.4 | 111.7 | 115.5 | 111.5 | 100.2 | 148.6 | |
| 1000 | 90.4 | 89.5 | 91.7 | 91.8 | 92.1 | 95.2 | 96.4 | 100.0 | 105.5 | 112.3 | 113.3 | 109.4 | 97.5 | 147.9 |
| 1250 | 88.8 | 91.1 | 92.6 | 92.6 | 94.0 | 96.3 | 97.2 | 100.9 | 106.6 | 112.2 | 114.3 | 108.0 | 96.5 | 148.2 |
| 1600 | 90.1 | 89.5 | 91.2 | 92.3 | 93.6 | 96.7 | 98.6 | 102.0 | 107.0 | 113.1 | 114.5 | 106.8 | 96.3 | 148.5 |
| 2000 | 89.5 | 90.6 | 92.6 | 91.9 | 93.2 | 96.1 | 98.2 | 102.1 | 108.1 | 114.4 | 113.9 | 105.8 | 96.6 | 148.8 |
| 2500 | 90.2 | 90.5 | 92.3 | 92.5 | 93.9 | 96.5 | 98.6 | 102.5 | 107.8 | 114.9 | 113.5 | 105.3 | 96.3 | 148.9 |
| 3150 | 93.0 | 92.3 | 92.6 | 92.8 | 94.2 | 97.3 | 99.2 | 103.1 | 108.1 | 113.2 | 112.6 | 104.8 | 95.8 | 148.1 |
| 4000 | 95.9 | 94.7 | 94.8 | 93.2 | 93.6 | 96.4 | 99.1 | 103.0 | 107.6 | 112.2 | 111.0 | 103.5 | 94.7 | 147.2 |
| 5000 | 95.4 | 95.2 | 96.5 | 95.7 | 95.5 | 97.1 | 99.0 | 103.5 | 106.8 | 111.7 | 109.8 | 102.7 | 94.4 | 146.8 |
| 6300 | 94.3 | 95.2 | 96.7 | 96.9 | 96.5 | 98.5 | 99.5 | 102.9 | 106.6 | 111.1 | 108.9 | 101.9 | 94.8 | 146.6 |
| 8000 | 94.3 | 95.8 | 95.9 | 97.0 | 98.5 | 99.7 | 99.7 | 102.6 | 106.4 | 109.8 | 108.2 | 101.9 | 94.4 | 146.4 |
| 10000 | 93.1 | 94.6 | 96.8 | 98.4 | 101.3 | 100.2 | 102.8 | 105.6 | 109.8 | 107.1 | 101.6 | 93.9 | 146.7 | |
| 12500 | 91.1 | 93.9 | 95.1 | 96.1 | 97.3 | 100.2 | 99.9 | 101.8 | 103.7 | 107.0 | 105.0 | 99.9 | 93.1 | 145.6 |
| 16000 | 89.5 | 92.4 | 94.3 | 95.0 | 98.2 | 99.6 | 98.6 | 101.0 | 102.6 | 106.4 | 102.8 | 98.7 | 92.2 | 146.1 |
| 20000 | 84.6 | 90.4 | 91.7 | 93.7 | 97.4 | 98.2 | 95.9 | 98.8 | 100.1 | 102.4 | 99.5 | 95.7 | 90.7 | 145.1 |
| 25000 | 84.0 | 86.5 | 89.3 | 89.8 | 93.8 | 95.2 | 93.3 | 94.1 | 98.7 | 98.3 | 95.9 | 92.5 | 88.8 | 144.3 |
| 31500 | 82.1 | 82.6 | 86.6 | 88.6 | 89.1 | 89.6 | 89.6 | 91.6 | 95.6 | 96.4 | 93.2 | 88.1 | 83.8 | 144.3 |
| 40000 | 76.6 | 77.8 | 80.8 | 82.9 | 87.1 | 87.6 | 84.4 | 86.2 | 89.8 | 90.7 | 87.9 | 82.4 | 79.5 | 143.4 |
| 50000 | 69.7 | 70.5 | 73.2 | 76.6 | 78.4 | 79.9 | 78.9 | 79.4 | 83.2 | 81.5 | 76.3 | 73.5 | 71.1 | 141.1 |
| 63000 | 63.9 | 64.3 | 66.9 | 69.7 | 70.2 | 71.4 | 72.9 | 73.1 | 79.6 | 77.5 | 75.0 | 70.3 | 67.1 | 140.3 |
| 80000 | 57.9 | 57.6 | 60.4 | 64.0 | 63.1 | 65.5 | 65.1 | 66.6 | 72.8 | 72.8 | 70.2 | 61.5 | 59.0 | 141.0 |
| OASPL | 104.3 | 105.0 | 106.4 | 106.6 | 108.4 | 110.2 | 110.6 | 114.0 | 118.4 | 124.1 | 125.0 | 121.4 | 115.4 | 160.7 |

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TEST DATE 02-27-78 TAPE NO. N299 IALPHA SB59 TAMB 33.00
LOCATION C41 ANECH CH AERO. RDG. ADH138 PAM3 29.5900 RELHUM 49.40

MODEL TEST POINT 7007 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 90.83 M/SEC (298.0 FPS) FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X70070

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 86.9 | 89.4 | 88.1 | 87.5 | 87.6 | 88.3 | 88.5 | 89.4 | 95.3 | 101.7 | 105.1 | 108.1 | 107.1 | 141.5 |
| 315 | 86.9 | 89.4 | 88.1 | 86.7 | 86.6 | 88.5 | 89.9 | 90.4 | 97.5 | 107.2 | 110.2 | 111.6 | 108.7 | 145.3 |
| 400 | 88.4 | 89.0 | 88.7 | 88.3 | 89.1 | 90.3 | 91.2 | 92.4 | 98.3 | 108.0 | 111.7 | 112.0 | 107.2 | 146.0 |
| 500 | 89.9 | 90.2 | 90.5 | 90.1 | 91.3 | 91.7 | 91.8 | 93.1 | 100.7 | 109.1 | 112.7 | 112.2 | 105.9 | 146.7 |
| 630 | 90.8 | 90.7 | 91.8 | 92.6 | 92.6 | 93.1 | 93.4 | 95.4 | 102.9 | 109.9 | 114.0 | 112.0 | 105.3 | 147.6 |
| 800 | 93.1 | 93.4 | 93.5 | 93.0 | 93.0 | 93.9 | 94.7 | 96.6 | 104.2 | 110.7 | 112.7 | 110.6 | 104.3 | 147.0 |
| 1000 | 94.2 | 92.6 | 93.8 | 94.3 | 93.6 | 95.6 | 95.6 | 98.2 | 105.3 | 110.5 | 113.4 | 108.9 | 102.9 | 147.1 |
| 1250 | 95.7 | 94.0 | 95.3 | 95.3 | 95.0 | 96.8 | 96.8 | 99.1 | 105.8 | 111.5 | 113.2 | 107.7 | 102.4 | 147.3 |
| 1600 | 94.4 | 95.8 | 96.3 | 95.0 | 95.3 | 97.3 | 98.0 | 100.4 | 107.1 | 113.0 | 112.7 | 107.0 | 102.9 | 147.9 |
| 2000 | 95.7 | 94.2 | 95.0 | 94.7 | 95.0 | 96.8 | 97.8 | 100.6 | 107.0 | 113.7 | 112.7 | 106.6 | 102.8 | 148.1 |
| 2500 | 95.1 | 95.3 | 96.4 | 95.5 | 95.8 | 97.4 | 98.4 | 101.2 | 107.6 | 112.4 | 112.1 | 106.5 | 102.7 | 147.6 |
| 3150 | 95.7 | 95.3 | 96.1 | 95.9 | 96.3 | 98.4 | 99.2 | 102.1 | 107.6 | 111.7 | 110.9 | 105.6 | 102.1 | 147.1 |
| 4000 | 98.3 | 96.9 | 96.4 | 95.7 | 95.8 | 97.9 | 99.4 | 102.3 | 107.1 | 111.7 | 110.1 | 105.3 | 102.3 | 147.0 |
| 5000 | 98.8 | 98.1 | 97.6 | 98.8 | 98.0 | 98.9 | 99.7 | 103.2 | 107.6 | 111.8 | 109.9 | 105.3 | 103.3 | 147.4 |
| 6300 | 99.3 | 99.0 | 99.8 | 100.7 | 99.9 | 100.8 | 100.6 | 103.1 | 107.9 | 110.9 | 109.6 | 105.4 | 103.0 | 147.6 |
| 8000 | 99.5 | 99.9 | 100.8 | 101.1 | 102.0 | 102.5 | 101.6 | 103.3 | 107.3 | 111.1 | 108.6 | 105.3 | 102.8 | 148.0 |
| 10000 | 99.4 | 100.5 | 100.1 | 101.9 | 102.4 | 104.3 | 102.0 | 103.5 | 105.7 | 108.5 | 106.8 | 103.9 | 102.3 | 147.6 |
| 12500 | 99.9 | 100.7 | 102.0 | 101.1 | 101.4 | 103.2 | 101.8 | 102.6 | 105.2 | 108.5 | 105.2 | 103.3 | 101.9 | 148.0 |
| 16000 | 97.3 | 99.4 | 99.7 | 100.1 | 102.2 | 102.6 | 100.6 | 101.8 | 103.7 | 105.7 | 103.3 | 102.0 | 102.7 | 147.9 |
| 20000 | 95.3 | 97.6 | 98.5 | 98.7 | 101.4 | 101.2 | 98.3 | 100.1 | 103.2 | 102.6 | 100.6 | 99.8 | 101.7 | 148.0 |
| 25000 | 89.8 | 94.9 | 95.3 | 94.8 | 97.9 | 98.2 | 95.8 | 95.7 | 100.0 | 100.3 | 97.4 | 94.4 | 95.4 | 147.0 |
| 31500 | 88.4 | 90.3 | 92.2 | 93.7 | 93.1 | 92.6 | 91.8 | 92.5 | 95.7 | 96.3 | 93.9 | 91.0 | 94.0 | 146.3 |
| 40000 | 85.7 | 85.5 | 88.6 | 88.0 | 91.2 | 90.6 | 86.8 | 87.7 | 91.1 | 89.3 | 88.0 | 85.4 | 88.4 | 145.9 |
| 50000 | 79.8 | 80.3 | 82.5 | 81.6 | 82.5 | 82.9 | 81.3 | 80.9 | 86.5 | 84.0 | 81.9 | 79.7 | 82.2 | 144.0 |
| 63000 | 71.9 | 72.0 | 73.9 | 74.7 | 74.3 | 74.4 | 75.2 | 74.3 | 80.9 | 80.4 | 78.1 | 71.6 | 74.1 | 143.0 |
| 80000 | 64.7 | 64.3 | 66.1 | 69.0 | 67.2 | 68.5 | 67.1 | 67.5 | 71.1 | 70.6 | 68.3 | 61.8 | 64.3 | 141.5 |

GASPL 109.5 109.8 110.4 110.6 111.5 112.4 111.6 113.7 118.5 123.4 123.9 121.2 117.3 161.0

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 298.00 REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 49.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 IALPHA SB59 TAMB 33.00
 LOCATION C41 ANECH CH AERG. RDG. ADH138 PAMB 29.5900 RELHUM 49.40

MODEL TEST POINT 7007 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 90.63 M/SEC (208.0 FPS) FREE-JET SPEED

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07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X70071

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 66.7 | 68.6 | 69.6 | 69.9 | 71.0 | 72.4 | 73.1 | 73.9 | 79.1 | 87.8 | 89.9 | 88.1 | 79.9 | 163.7 |
| 63 | 68.1 | 70.0 | 71.3 | 71.6 | 73.2 | 73.8 | 73.8 | 74.6 | 81.5 | 86.9 | 90.6 | 88.1 | 78.6 | 164.3 |
| 80 | 68.9 | 70.4 | 72.6 | 74.0 | 81.5 | 75.1 | 75.3 | 76.9 | 83.6 | 89.6 | 92.1 | 87.9 | 77.9 | 165.3 |
| 100 | 71.2 | 73.1 | 74.2 | 74.5 | 74.8 | 75.9 | 76.6 | 78.1 | 84.9 | 90.3 | 90.8 | 86.4 | 76.7 | 164.7 |
| 125 | 72.1 | 72.1 | 74.5 | 75.7 | 75.4 | 77.5 | 77.4 | 79.6 | 85.9 | 90.1 | 91.4 | 84.6 | 75.1 | 164.8 |
| 160 | 73.4 | 73.3 | 75.8 | 76.6 | 77.2 | 78.6 | 78.2 | 80.4 | 86.3 | 90.9 | 91.0 | 83.1 | 74.1 | 165.0 |
| 200 | 71.9 | 75.0 | 76.7 | 76.1 | 76.8 | 78.9 | 79.5 | 81.4 | 87.4 | 92.2 | 90.3 | 82.0 | 74.2 | 165.8 |
| 250 | 72.9 | 73.1 | 75.1 | 75.6 | 76.3 | 78.2 | 79.1 | 81.6 | 87.0 | 92.6 | 89.8 | 81.3 | 73.5 | 165.8 |
| 315 | 71.9 | 73.9 | 76.2 | 76.1 | 76.8 | 78.5 | 79.4 | 81.8 | 87.4 | 90.9 | 88.8 | 80.6 | 72.6 | 165.2 |
| 400 | 72.0 | 73.4 | 75.6 | 76.1 | 77.0 | 79.2 | 79.9 | 82.3 | 87.1 | 89.9 | 87.2 | 79.1 | 70.9 | 164.8 |
| 500 | 74.1 | 74.7 | 75.5 | 75.7 | 76.2 | 78.5 | 79.8 | 82.3 | 86.2 | 89.5 | 85.9 | 78.1 | 70.2 | 164.6 |
| 630 | 75.1 | 75.5 | 76.4 | 76.4 | 78.1 | 79.3 | 79.9 | 82.9 | 86.3 | 89.2 | 85.2 | 77.4 | 70.1 | 165.1 |
| 800 | 74.1 | 76.0 | 78.3 | 80.1 | 79.9 | 80.9 | 80.6 | 82.5 | 86.3 | 87.9 | 84.3 | 76.8 | 68.7 | 165.2 |
| 1000 | 73.8 | 76.6 | 79.0 | 80.4 | 81.8 | 82.5 | 81.3 | 82.6 | 85.5 | 87.8 | 82.9 | 76.0 | 67.3 | 165.7 |
| 1250 | 73.2 | 76.8 | 78.1 | 81.0 | 82.1 | 84.2 | 81.7 | 82.6 | 83.7 | 84.9 | 80.6 | 73.9 | 65.3 | 165.3 |
| 1600 | 72.9 | 76.4 | 79.6 | 79.9 | 80.7 | 82.8 | 81.2 | 81.3 | 82.7 | 84.3 | 78.2 | 71.9 | 62.6 | 165.6 |
| 2000 | 69.4 | 74.6 | 76.9 | 78.6 | 81.4 | 82.1 | 79.8 | 80.3 | 80.9 | 80.8 | 76.3 | 68.9 | 60.4 | 165.8 |
| 2500 | 65.6 | 71.5 | 74.9 | 76.5 | 80.1 | 80.2 | 76.9 | 78.0 | 79.5 | 76.5 | 70.9 | 64.0 | 54.5 | 165.7 |
| 3150 | 66.7 | 66.4 | 69.8 | 71.1 | 75.2 | 75.8 | 73.0 | 72.0 | 74.5 | 71.8 | 64.2 | 53.6 | 39.8 | 164.7 |
| 4000 | 48.0 | 67.0 | 62.8 | 66.7 | 67.4 | 67.3 | 66.1 | 65.5 | 66.4 | 63.1 | 54.6 | 41.2 | 23.9 | 164.0 |
| 5000 | 36.5 | 44.7 | 53.0 | 55.6 | 60.5 | 60.4 | 58.1 | 55.3 | 55.5 | 48.5 | 38.9 | 22.0 | | 163.6 |
| 6300 | 12.9 | 25.3 | 34.8 | 38.4 | 41.7 | 42.9 | 40.5 | 37.7 | 38.8 | 29.0 | 14.9 | | | 161.7 |
| 8000 | | | 4.9 | 12.3 | 15.4 | 16.6 | 16.3 | 11.8 | 11.9 | 0.6 | | | | 160.7 |
| 10000 | | | | | | | | | | | | | | 159.2 |

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OASPL 84.7 86.8 88.8 90.0 91.5 92.5 91.7 93.4 97.6 101.6 100.9 95.5 86.6 178.4
 PNLT 92.1 95.4 98.1 99.3 101.7 102.4 100.9 101.9 104.7 106.8 104.1 96.7 87.8
 PNLT 93.3 95.4 98.8 99.3 103.0 103.5 100.9 101.9 105.3 106.8 104.1 96.7 87.6

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 33.00
 LOCATION C41 ANECH CH AERO. RDG. ADH138 PAPB 29.5900 RELHUM 49.40

MODEL TEST POINT 7007. ACOUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 90.93 M/SEC (299.0 FPS) FREE-JET SPEED

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X70080
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 81.0 | 83.5 | 83.5 | 85.1 | 85.2 | 87.1 | 89.1 | 91.0 | 95.0 | 102.4 | 106.6 | 109.7 | 108.6 | 142.8 |
| 315 | 82.2 | 84.0 | 84.7 | 86.8 | 86.1 | 88.6 | 89.2 | 91.4 | 96.6 | 104.0 | 108.1 | 110.8 | 108.0 | 143.7 |
| 400 | 84.1 | 84.6 | 86.2 | 85.6 | 87.2 | 89.1 | 90.2 | 92.4 | 98.4 | 108.0 | 111.2 | 111.8 | 105.2 | 145.6 |
| 500 | 84.1 | 85.4 | 87.2 | 87.0 | 89.1 | 90.7 | 91.8 | 94.0 | 99.5 | 109.8 | 113.2 | 111.2 | 102.1 | 146.7 |
| 630 | 85.5 | 86.6 | 88.1 | 87.6 | 89.7 | 91.6 | 93.0 | 96.6 | 101.6 | 110.7 | 114.1 | 110.0 | 98.7 | 147.2 |
| 800 | 87.8 | 86.6 | 89.1 | 89.6 | 90.0 | 92.9 | 94.5 | 97.9 | 103.6 | 111.7 | 114.6 | 107.8 | 97.2 | 147.6 |
| 1000 | 88.7 | 87.9 | 90.7 | 90.8 | 91.6 | 94.0 | 95.3 | 99.3 | 105.0 | 111.8 | 113.2 | 104.6 | 95.8 | 146.9 |
| 1250 | 88.0 | 90.3 | 91.8 | 92.4 | 93.0 | 95.1 | 96.5 | 100.4 | 105.8 | 111.7 | 113.3 | 104.0 | 95.4 | 147.1 |
| 1600 | 89.6 | 88.7 | 90.5 | 91.7 | 93.1 | 95.2 | 97.8 | 100.8 | 107.2 | 112.3 | 112.3 | 103.0 | 95.0 | 147.1 |
| 2000 | 89.0 | 89.3 | 91.3 | 91.1 | 91.9 | 94.8 | 97.2 | 101.3 | 107.8 | 113.7 | 111.4 | 102.8 | 95.6 | 147.6 |
| 2500 | 89.4 | 90.2 | 91.2 | 91.5 | 93.3 | 95.7 | 98.3 | 102.3 | 107.5 | 114.4 | 112.0 | 103.5 | 95.7 | 148.2 |
| 3150 | 93.5 | 93.1 | 92.3 | 92.8 | 93.9 | 96.5 | 98.7 | 102.8 | 108.3 | 113.0 | 110.9 | 103.3 | 95.3 | 147.4 |
| 4000 | 95.6 | 94.5 | 94.7 | 93.0 | 93.3 | 95.9 | 98.8 | 102.5 | 107.5 | 111.6 | 109.5 | 101.7 | 94.4 | 146.5 |
| 5000 | 95.1 | 95.2 | 96.5 | 95.7 | 95.5 | 96.9 | 99.3 | 103.0 | 106.7 | 110.9 | 108.5 | 101.4 | 94.4 | 146.1 |
| 6300 | 94.3 | 95.2 | 96.5 | 96.4 | 97.1 | 98.9 | 102.4 | 106.8 | 109.9 | 107.4 | 100.6 | 94.6 | 94.6 | 145.8 |
| 8000 | 94.1 | 95.3 | 96.2 | 96.3 | 98.5 | 99.2 | 99.5 | 102.1 | 106.4 | 109.0 | 107.0 | 100.1 | 93.9 | 145.8 |
| 10000 | 93.2 | 94.6 | 96.3 | 96.6 | 98.9 | 101.1 | 99.5 | 102.6 | 105.9 | 108.6 | 105.6 | 100.3 | 93.4 | 146.0 |
| 12500 | 91.4 | 92.9 | 94.6 | 95.6 | 97.9 | 99.8 | 100.2 | 101.4 | 104.0 | 106.2 | 103.0 | 99.0 | 92.9 | 145.1 |
| 16000 | 90.1 | 92.5 | 94.6 | 94.8 | 97.7 | 99.7 | 98.9 | 100.8 | 102.4 | 105.5 | 101.6 | 97.3 | 92.0 | 145.6 |
| 20000 | 85.1 | 90.2 | 92.0 | 93.2 | 97.5 | 98.5 | 96.4 | 98.6 | 100.9 | 102.2 | 98.2 | 95.0 | 91.0 | 145.1 |
| 25000 | 84.3 | 86.1 | 89.4 | 89.8 | 94.7 | 95.8 | 93.6 | 93.6 | 98.5 | 97.1 | 94.7 | 91.8 | 88.8 | 144.0 |
| 31500 | 82.6 | 82.9 | 86.9 | 88.2 | 89.2 | 89.7 | 89.9 | 91.2 | 94.7 | 95.7 | 92.5 | 87.4 | 84.4 | 143.9 |
| 40000 | 77.4 | 77.2 | 81.7 | 83.0 | 87.7 | 87.9 | 85.0 | 86.1 | 89.9 | 89.8 | 86.5 | 81.4 | 80.1 | 143.3 |
| 50000 | 69.8 | 70.8 | 73.8 | 75.1 | 78.8 | 80.0 | 79.7 | 78.7 | 84.3 | 82.3 | 80.3 | 76.4 | 73.8 | 140.8 |
| 63000 | 64.0 | 64.3 | 67.0 | 69.5 | 70.6 | 71.2 | 73.7 | 72.7 | 79.1 | 75.6 | 73.6 | 69.9 | 67.4 | 139.7 |
| 80000 | 58.0 | 57.5 | 61.0 | 64.1 | 63.2 | 65.6 | 65.4 | 65.9 | 72.7 | 69.9 | 68.6 | 61.1 | 58.8 | 140.1 |
| OASPL | 104.1 | 104.7 | 106.0 | 106.2 | 108.2 | 109.8 | 110.4 | 113.5 | 118.3 | 123.5 | 123.7 | 119.4 | 113.8 | 159.9 |

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| | | | | | | | |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | SB59 | TAMB | 33.00 |
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH137 | PAMB | 29.5900 | RELHUM | 50.80 |

| | | | | |
|-------|------------|-----------------------|------------------------------------|---------------------------|
| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
| 7000 | 7008 | 12.2 M (40.0 FT) ARC | 154.7 SQ CH (23.99 SQ IN) - MODEL | 117.65 M/SEC (386.0 FPS) |

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X70080

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

CASPL

110.9

110.9

111.2

110.3

112.0

112.3

111.5

113.1

118.6

122.8

122.5

119.4

118.0

160.6

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 386.00 REFRACTION CORRECTION - YES FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 IALPHA SB59 TAMB 33.00
LOCATION C41 ANECH CH AERC. RDG. ADH137 PAMB 29.5900 RELHUM 50.60

MODEL TEST POINT 7008 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.65 M/SEC (386.0 FPS) FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - J-400-FMODL X70081

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 67.6 | 69.8 | 70.3 | 69.6 | 70.8 | 71.4 | 71.4 | 72.2 | 78.0 | 86.8 | 88.7 | 86.0 | 77.3 | 162.2 |
| 63 | 68.8 | 69.9 | 71.4 | 70.2 | 72.9 | 73.1 | 72.7 | 73.3 | 80.2 | 87.7 | 89.7 | 85.4 | 75.5 | 162.7 |
| 80 | 69.7 | 71.3 | 72.7 | 71.8 | 80.1 | 74.0 | 73.8 | 75.8 | 82.5 | 89.0 | 90.5 | 84.2 | 76.2 | 163.6 |
| 100 | 73.6 | 74.5 | 75.3 | 75.5 | 73.8 | 75.3 | 75.4 | 77.1 | 84.2 | 89.5 | 89.8 | 82.1 | 77.0 | 163.4 |
| 125 | 72.9 | 72.2 | 74.5 | 74.4 | 75.4 | 76.5 | 76.3 | 78.4 | 85.1 | 89.4 | 89.9 | 81.3 | 76.2 | 163.5 |
| 160 | 73.8 | 73.5 | 76.1 | 75.5 | 76.8 | 77.6 | 77.4 | 79.6 | 86.5 | 90.0 | 88.8 | 80.1 | 75.2 | 163.7 |
| 200 | 72.9 | 75.7 | 77.1 | 77.0 | 76.9 | 78.8 | 78.8 | 80.0 | 87.2 | 91.5 | 87.9 | 79.9 | 75.6 | 164.5 |
| 250 | 74.2 | 73.9 | 75.6 | 76.3 | 75.8 | 77.4 | 78.2 | 80.6 | 87.0 | 92.3 | 88.7 | 80.6 | 75.6 | 165.3 |
| 315 | 73.1 | 74.2 | 76.2 | 75.5 | 77.2 | 78.4 | 79.4 | 81.6 | 88.0 | 91.0 | 87.6 | 80.4 | 74.9 | 165.1 |
| 400 | 73.0 | 74.7 | 75.9 | 75.8 | 77.6 | 79.3 | 79.9 | 82.3 | 87.5 | 90.0 | 86.4 | 78.6 | 73.5 | 164.8 |
| 500 | 75.4 | 76.4 | 76.2 | 76.6 | 76.7 | 78.9 | 80.3 | 82.2 | 86.6 | 89.0 | 84.9 | 77.7 | 72.5 | 164.5 |
| 630 | 75.9 | 76.3 | 77.5 | 76.0 | 79.5 | 80.2 | 80.9 | 82.7 | 86.5 | 87.8 | 83.5 | 76.7 | 72.3 | 164.5 |
| 800 | 75.8 | 77.8 | 80.0 | 79.5 | 81.1 | 81.9 | 80.4 | 81.9 | 85.9 | 86.7 | 82.8 | 75.5 | 70.6 | 164.7 |
| 1000 | 75.6 | 78.2 | 80.2 | 80.2 | 82.3 | 82.2 | 80.8 | 81.5 | 85.4 | 86.1 | 81.3 | 75.5 | 69.4 | 165.1 |
| 1250 | 74.8 | 77.8 | 79.5 | 79.7 | 82.6 | 83.9 | 80.6 | 81.8 | 84.2 | 84.5 | 79.4 | 74.8 | 69.1 | 165.3 |
| 1600 | 72.7 | 76.3 | 78.9 | 79.5 | 81.8 | 82.3 | 81.7 | 80.9 | 82.9 | 83.8 | 77.8 | 72.4 | 66.5 | 165.6 |
| 2000 | 72.1 | 75.6 | 78.0 | 78.8 | 81.4 | 82.1 | 80.3 | 80.2 | 82.3 | 81.4 | 74.9 | 69.9 | 63.6 | 166.3 |
| 2500 | 68.6 | 73.6 | 76.7 | 76.9 | 80.6 | 80.4 | 77.5 | 77.9 | 80.1 | 75.9 | 70.0 | 63.7 | 55.9 | 166.2 |
| 3150 | 68.7 | 68.2 | 71.6 | 73.2 | 76.5 | 76.4 | 73.4 | 71.8 | 74.3 | 72.2 | 65.0 | 55.4 | 44.8 | 165.6 |
| 4000 | 51.8 | 58.6 | 64.4 | 65.7 | 67.5 | 67.4 | 68.5 | 65.4 | 67.4 | 63.2 | 54.3 | 41.8 | 26.8 | 164.5 |
| 5000 | 36.9 | 44.9 | 53.2 | 56.7 | 61.5 | 60.8 | 56.8 | 55.5 | 56.0 | 48.5 | 38.6 | 23.3 | | 164.1 |
| 6300 | 16.2 | 26.7 | 37.1 | 41.5 | 42.5 | 43.0 | 41.4 | 37.3 | 39.6 | 28.6 | 15.2 | | | 162.8 |
| 8000 | | | 7.0 | 14.4 | 15.6 | 16.4 | 17.3 | 12.0 | 12.1 | | | | | 161.1 |
| 10000 | | | | | | | | | | | | | | 159.0 |

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OASPL 86.0 87.8 88.6 89.5 91.8 92.4 91.5 92.8 97.8 101.1 99.5 93.1 86.5 178.2
 PNL 93.5 96.5 99.1 99.3 102.2 102.4 101.0 101.5 105.0 106.4 102.9 95.7 89.6
 PNL 93.5 96.5 99.9 100.0 103.6 103.7 101.0 101.5 105.7 106.4 102.9 95.7 89.6

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 33.00
 LOCATION C41 ANECH CH AERO. RDG. ADH137 PAMB 29.5900 RELHUM 50.60

MODEL TEST POINT 7008 ACQUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 117.65 M/SEC (386.0 FPS) FREE-JET SPEED

06/30/79 19.452

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARCIDENTIFICATION - MODEL FJ-ZER-FMODL X70090
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250 82.3 87.1 85.8 86.6 87.2 89.6 91.7 93.4 95.1 102.6 106.5 109.5 109.4 143.0
 315 83.1 86.7 86.5 86.6 86.6 90.9 91.6 94.0 100.2 104.7 108.6 110.8 110.0 144.6
 400 84.9 87.7 88.0 87.5 89.1 91.7 92.5 94.7 101.2 107.3 110.4 112.1 110.0 145.9
 500 85.7 88.3 89.0 88.8 90.4 92.5 93.7 95.8 102.0 108.1 111.0 111.9 110.1 146.2
 630 86.6 90.1 90.1 89.9 95.5 93.6 95.0 97.7 104.1 108.5 110.3 111.3 109.4 146.1
 800 89.4 89.5 90.9 92.0 92.6 94.7 95.8 98.7 105.7 109.5 110.1 110.1 109.0 146.2
 1000 91.5 92.0 93.0 92.6 92.9 95.8 96.4 99.6 107.3 109.1 109.5 109.7 108.8 146.2
 1250 89.3 93.4 93.7 94.5 96.4 97.5 100.9 106.8 108.7 110.6 110.8 109.2 146.8
 1600 91.7 91.5 92.6 93.6 94.7 96.8 97.9 101.3 108.0 109.4 110.9 111.3 110.3 147.3
 2000 91.9 93.9 93.7 93.4 94.3 96.1 98.0 101.4 107.6 109.8 110.2 109.7 108.9 146.7
 2500 91.6 93.6 93.6 94.1 95.4 97.0 98.9 102.1 107.2 110.2 110.6 111.1 108.6 147.2
 3150 92.6 94.9 93.7 94.4 95.5 98.1 99.7 102.9 108.1 109.5 110.2 108.9 106.6 146.8
 4000 91.9 93.0 93.8 93.8 94.8 97.4 99.3 102.8 107.2 108.2 109.3 107.0 105.5 145.8
 5000 91.5 93.4 93.2 93.9 95.2 98.3 99.5 102.9 107.1 108.3 108.9 106.6 105.3 145.9
 6300 90.6 93.4 93.7 93.9 95.2 97.8 99.0 102.4 106.4 107.1 108.1 106.4 105.1 145.4
 8000 90.4 94.1 93.5 93.8 95.4 97.5 98.8 101.7 105.9 106.0 106.8 105.4 104.2 145.0
 10000 88.3 93.7 93.6 94.5 95.6 98.2 98.1 101.2 104.3 105.3 105.4 104.5 103.1 144.6
 12500 85.6 90.8 91.2 93.3 95.3 96.7 96.4 99.8 101.7 102.7 103.2 102.5 101.4 143.4
 16000 83.4 88.4 90.7 91.6 94.8 96.8 95.5 98.1 99.7 101.0 100.8 100.6 99.6 143.1
 20000 78.4 86.2 87.0 88.6 92.7 94.5 92.6 94.7 96.8 97.4 97.5 98.0 97.0 141.9
 25000 76.7 81.8 83.8 84.9 89.5 90.7 89.5 90.0 93.8 93.4 93.5 93.4 95.0 140.6
 31500 75.5 77.8 81.6 83.9 84.5 85.5 84.9 86.7 89.9 91.7 91.7 88.5 89.0 140.3
 40000 70.0 73.0 76.3 78.2 82.2 83.2 80.0 81.5 85.0 86.4 86.6 83.2 84.7 139.6
 50000 62.6 65.9 68.4 71.3 74.3 75.5 74.7 74.4 79.9 79.4 80.2 78.7 79.1 137.6
 63000 58.7 59.4 62.0 64.4 65.5 66.2 68.7 67.8 75.9 72.7 74.7 73.2 74.0 137.2
 80000 50.5 52.3 55.5 59.2 58.9 60.8 60.9 61.8 69.2 65.9 70.4 65.6 65.1 137.7

CASPL 102.5 104.9 105.1 105.6 107.2 109.2 110.2 113.3 118.4 120.6 122.0 122.2 120.8 158.9

ORIGINAL PAGE IS
OF POOR QUALITYTEST DATE 02-21-78 TAPE NO. N294 IALPHA SB59 TAMB 23.00
LOCATION C41 ANECH CH AERO. RDG. ADH086 PAMB 29.3810 RELHUM 46.00MODEL TEST POINT ACQUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CH (23.99 SQ IN) - MODEL SIZE FREE-JET SPEED
7000 7009 0. M/SEC (0. FPS)5
5

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X70090

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

102.5 104.9 105.1 105.6 107.2 109.2 110.2 113.3 118.4 120.6 122.0 122.2 120.8 159.9

MODEL/FULL SIZE SCALE FACTOR
INPUT 1.000 CALC. 1.000

FREE JET VELOCITY (FT/SEC)
FREE JET DIAMETER (IN)

REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

TEST DATE 02-21-78
LOCATION C41 ANECH CH

TAPE NO. N294
AERO. RDG. ADH086

ALPHA SB59
PAMB 29.3810

TAMB 23.00
RELHUM 46.00

MODEL TEST POINT
7000

ACUSTIC RANGE
12.2 M (40.0 FT) ARC

SIZE
154.7 SQ CM (23.99 SQ IN) - MODEL

FREE-JET SPEED
0. M/SEC (0. FPS)

ORIGINAL PAGE IS
OF POOR QUALITY

08/30/79 19.452

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X70091

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PNL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 63.1 | 67.4 | 68.8 | 69.0 | 71.0 | 73.8 | 74.5 | 76.3 | 82.0 | 87.0 | 88.6 | 88.1 | 82.7 | 163.5 |
| 63 | 63.9 | 68.0 | 69.6 | 70.3 | 72.4 | 74.8 | 75.6 | 77.3 | 82.6 | 87.8 | 89.2 | 87.9 | 82.7 | 163.9 |
| 80 | 64.7 | 69.8 | 70.9 | 71.4 | 77.4 | 75.7 | 76.9 | 79.2 | 84.9 | 88.2 | 88.5 | 87.2 | 82.0 | 163.8 |
| 100 | 67.4 | 69.5 | 71.6 | 73.4 | 74.4 | 78.7 | 77.7 | 80.2 | 86.4 | 89.1 | 88.2 | 85.9 | 81.3 | 163.8 |
| 125 | 69.4 | 71.5 | 73.7 | 73.9 | 74.7 | 77.7 | 78.2 | 80.9 | 87.9 | 88.6 | 87.4 | 85.3 | 81.0 | 163.8 |
| 160 | 67.1 | 72.7 | 73.9 | 74.9 | 76.2 | 78.2 | 79.2 | 82.2 | 87.3 | 88.1 | 88.3 | 86.2 | 80.9 | 164.3 |
| 200 | 69.2 | 70.7 | 72.9 | 74.7 | 76.2 | 78.4 | 79.4 | 82.4 | 88.3 | 88.6 | 88.4 | 86.4 | 81.6 | 164.9 |
| 250 | 69.0 | 72.8 | 73.7 | 74.3 | 75.6 | 77.6 | 79.3 | 82.3 | 87.6 | 87.6 | 87.4 | 84.3 | 79.6 | 164.4 |
| 315 | 68.5 | 72.4 | 73.4 | 74.7 | 76.5 | 78.2 | 80.0 | 82.7 | 87.0 | 88.8 | 87.4 | 85.2 | 78.4 | 164.9 |
| 400 | 68.8 | 73.0 | 73.1 | 74.7 | 76.2 | 79.0 | 80.5 | 83.2 | 87.5 | 87.7 | 86.5 | 82.3 | 75.5 | 164.5 |
| 500 | 67.7 | 70.8 | 72.9 | 73.7 | 75.3 | 78.1 | 79.8 | 82.7 | 86.3 | 85.9 | 85.1 | 79.8 | 73.3 | 163.5 |
| 630 | 66.9 | 70.8 | 71.9 | 73.6 | 75.4 | 78.7 | 79.6 | 82.6 | 85.8 | 85.7 | 84.2 | 78.7 | 72.1 | 163.6 |
| 800 | 65.4 | 70.4 | 72.2 | 73.3 | 75.1 | 77.9 | 78.9 | 81.8 | 84.6 | 84.1 | 82.9 | 77.8 | 70.7 | 163.1 |
| 1000 | 64.8 | 70.8 | 71.7 | 73.1 | 75.2 | 77.5 | 78.6 | 80.9 | 84.1 | 82.7 | 81.1 | 76.2 | 68.7 | 162.7 |
| 1250 | 62.2 | 70.0 | 71.6 | 73.5 | 75.2 | 78.1 | 77.6 | 80.2 | 82.3 | 81.6 | 79.3 | 74.4 | 66.2 | 162.3 |
| 1600 | 58.6 | 68.5 | 68.8 | 72.0 | 74.7 | 76.3 | 75.8 | 78.5 | 79.3 | 78.5 | 76.1 | 71.0 | 62.1 | 161.1 |
| 2000 | 55.4 | 63.8 | 67.9 | 70.1 | 74.0 | 76.2 | 74.7 | 76.6 | 76.9 | 76.2 | 72.9 | 67.6 | 57.3 | 160.8 |
| 2500 | 46.6 | 60.2 | 63.3 | 66.4 | 71.3 | 73.4 | 71.3 | 72.5 | 73.1 | 71.3 | 67.7 | 62.2 | 49.8 | 159.6 |
| 3150 | 43.6 | 53.3 | 58.3 | 61.2 | 68.8 | 68.3 | 66.7 | 66.2 | 68.3 | 64.9 | 60.3 | 52.6 | 39.4 | 158.3 |
| 4000 | 38.1 | 44.6 | 52.2 | 56.9 | 58.8 | 60.2 | 59.2 | 59.7 | 60.5 | 58.4 | 52.3 | 38.7 | 14.9 | 157.9 |
| 5000 | 20.8 | 32.2 | 40.6 | 45.8 | 51.5 | 53.0 | 49.3 | 49.1 | 49.4 | 45.6 | 37.5 | 19.8 | | 157.3 |
| 6300 | 10.9 | 20.7 | 28.1 | 33.5 | 35.5 | 33.9 | 31.2 | 32.2 | 24.4 | 13.3 | | | | 155.3 |
| 8000 | | | | | | | | | | | | | | 154.8 |
| 10000 | | | | | | | | | | | | | | 155.4 |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|-------|-------|-------|------|------|-------|
| GASPL | 78.9 | 82.9 | 84.4 | 85.7 | 87.7 | 89.9 | 90.7 | 93.4 | 96.0 | 99.2 | 98.7 | 96.5 | 91.2 | 176.3 |
| PNL | 83.2 | 88.4 | 90.6 | 92.7 | 95.7 | 98.0 | 97.7 | 99.9 | 103.3 | 103.5 | 102.2 | 98.9 | 92.5 | |
| PNLT | 83.2 | 89.4 | 90.8 | 92.7 | 96.9 | 99.1 | 97.7 | 99.9 | 103.3 | 103.5 | 103.3 | 98.9 | 93.7 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

| | | | | | | | |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| TEST DATE | 02-21-78 | TAPE NO. | N294 | ALPHA | SB59 | TAMB | 23.00 |
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH086 | PAMB | 29.3810 | RELHUM | 46.00 |

| | | | | |
|-------|------------|-------------------------|-------------------------------------|--------------------|
| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
| 7000 | 7009 | 731.5 M (2400.0 FT) SL | 9032.2 SQ CM (1400.00 SQ IN) - FULL | 0. M/SEC (0. FPS) |

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X70100
 BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 78.7 | 81.5 | 81.5 | 82.8 | 83.4 | 85.5 | 87.4 | 89.5 | 92.3 | 95.4 | 102.8 | 106.5 | 105.4 | 139.4 |
| 315 | 79.8 | 81.8 | 82.8 | 82.9 | 84.8 | 86.6 | 87.5 | 89.9 | 94.2 | 100.2 | 103.6 | 107.6 | 105.0 | 140.2 |
| 400 | 81.9 | 82.4 | 83.4 | 83.7 | 85.6 | 87.4 | 88.3 | 90.2 | 94.7 | 103.5 | 106.4 | 107.6 | 102.8 | 141.3 |
| 500 | 82.2 | 83.2 | 85.1 | 84.8 | 89.2 | 88.0 | 89.4 | 91.8 | 96.0 | 104.8 | 106.7 | 106.4 | 99.6 | 141.3 |
| 630 | 82.8 | 83.8 | 85.9 | 86.2 | 89.0 | 89.6 | 90.5 | 94.2 | 98.4 | 105.4 | 106.8 | 104.0 | 95.7 | 141.6 |
| 800 | 85.3 | 84.4 | 86.6 | 87.9 | 88.3 | 90.4 | 92.3 | 95.4 | 100.9 | 106.7 | 106.4 | 101.5 | 91.4 | 141.5 |
| 1000 | 86.4 | 85.2 | 88.2 | 87.8 | 89.4 | 91.2 | 93.1 | 96.3 | 101.7 | 106.6 | 106.2 | 99.6 | 88.8 | 141.5 |
| 1250 | 85.5 | 86.8 | 88.8 | 89.4 | 90.7 | 92.8 | 94.0 | 97.9 | 102.1 | 106.4 | 106.3 | 98.5 | 88.4 | 141.6 |
| 1600 | 87.8 | 86.2 | 88.5 | 89.5 | 91.1 | 93.7 | 94.8 | 98.5 | 103.0 | 106.0 | 105.5 | 97.2 | 88.5 | 141.5 |
| 2000 | 86.5 | 86.8 | 89.0 | 90.1 | 90.4 | 93.3 | 94.6 | 98.6 | 103.0 | 106.4 | 105.1 | 96.8 | 89.3 | 141.5 |
| 2500 | 87.4 | 87.7 | 88.9 | 90.2 | 91.8 | 93.9 | 96.3 | 99.7 | 102.9 | 107.5 | 105.0 | 96.2 | 89.2 | 142.2 |
| 3150 | 87.9 | 88.0 | 89.3 | 91.0 | 92.3 | 94.7 | 96.1 | 100.3 | 103.8 | 106.4 | 105.0 | 97.7 | 89.2 | 142.1 |
| 4000 | 87.8 | 87.9 | 89.7 | 90.7 | 91.5 | 94.1 | 96.0 | 99.7 | 102.7 | 105.8 | 104.2 | 97.1 | 88.9 | 141.5 |
| 5000 | 88.3 | 87.6 | 89.4 | 90.9 | 92.2 | 94.8 | 96.4 | 100.4 | 102.4 | 105.6 | 104.4 | 97.6 | 89.3 | 141.7 |
| 6300 | 88.5 | 88.6 | 89.9 | 90.1 | 91.6 | 95.2 | 96.6 | 99.9 | 102.3 | 105.3 | 104.3 | 97.8 | 90.0 | 141.8 |
| 8000 | 90.1 | 89.9 | 90.2 | 90.0 | 92.1 | 94.5 | 95.8 | 99.4 | 102.2 | 104.3 | 104.3 | 97.6 | 90.6 | 141.8 |
| 10000 | 88.3 | 89.8 | 91.5 | 91.0 | 92.3 | 95.2 | 95.1 | 99.0 | 101.0 | 103.8 | 102.5 | 97.5 | 90.8 | 141.6 |
| 12500 | 86.0 | 87.8 | 89.5 | 90.7 | 92.2 | 94.1 | 94.0 | 97.5 | 99.1 | 101.4 | 100.4 | 96.3 | 90.0 | 140.6 |
| 16000 | 83.6 | 85.6 | 87.9 | 89.9 | 92.5 | 94.0 | 92.9 | 96.4 | 97.8 | 100.6 | 97.7 | 94.6 | 88.5 | 140.7 |
| 20000 | 78.6 | 83.7 | 85.0 | 86.7 | 90.4 | 92.5 | 90.2 | 93.3 | 95.0 | 96.6 | 94.9 | 92.0 | 86.9 | 139.5 |
| 25000 | 77.8 | 79.8 | 83.1 | 83.7 | 88.0 | 89.4 | 87.7 | 88.3 | 92.4 | 92.2 | 91.1 | 87.8 | 85.1 | 138.5 |
| 31500 | 75.8 | 76.3 | 80.3 | 82.2 | 82.6 | 83.6 | 83.3 | 85.4 | 89.3 | 89.9 | 87.8 | 89.8 | 80.3 | 138.2 |
| 40000 | 71.4 | 71.4 | 74.9 | 76.9 | 81.0 | 81.2 | 78.5 | 80.7 | 84.1 | 83.6 | 82.4 | 78.2 | 75.8 | 137.3 |
| 50000 | 64.3 | 64.6 | 67.6 | 70.6 | 72.6 | 73.8 | 73.1 | 73.4 | 78.9 | 76.7 | 75.8 | 72.7 | 69.8 | 135.2 |
| 63000 | 58.1 | 58.7 | 61.3 | 64.0 | 64.0 | 65.9 | 67.2 | 66.4 | 73.5 | 69.3 | 69.1 | 66.8 | 63.5 | 134.0 |
| 80000 | 52.9 | 52.1 | 55.1 | 58.4 | 57.0 | 60.6 | 59.4 | 60.0 | 66.1 | 63.0 | 62.9 | 58.3 | 55.7 | 134.1 |
| GASPL | 99.3 | 99.7 | 101.4 | 102.2 | 105.0 | 106.0 | 107.1 | 110.6 | 113.9 | 117.9 | 117.7 | 115.0 | 110.5 | 154.7 |

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TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 38.00
 LOCATION C41 ANECH CH AERO. RDG. ADH114 PAMB 29.3300 RELHUM 53.60

MODEL TEST POINT ACUSTIC RANGE 154.7 SQ CM (23.99 SQ IN) - MODEL 89.61 M/SEC (294.0 FPS)
 7000 12.2 M (40.0 FT) ARC

FREE-JET SPEED

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS

IDENTIFICATION - FJ-300-FMODL X70100

ANGLES MEASURED FROM INLET, DEGREES

[illegible]

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OF POOR QUALITY

IASPL 104.7 104.5 105.3 105.8 107.5 107.9 107.7 110.2 114.0 117.2 116.8 114.4 111.9 155.2

| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | TURBULANCE CORRECTION - YES |
| | 294.00 | 48.00 |

| TEST DATE | 02-27-78 | TAPE NO. | N299 | 1ALPHA | SB59 | TAMB | 38.00 |
|-----------|--------------|------------|--------|--------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH114 | PAMB | 29.3300 | RELHUM | 53.60 |

| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
|-------|------------|-----------------------|----------------------------|--------------------------|
| 7000 | 7010 | 12.2 M (40.0 FT) ARC | 154.7 SQ CM (23.99 SQ IN) | 89.61 M/SEC (294.0 FPS) |

509

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X70101

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 63.6 | 66.2 | 67.2 | 67.7 | 68.8 | 69.6 | 69.6 | 70.4 | 75.1 | 82.5 | 82.9 | 81.6 | 74.1 | 157.5 |
| 63 | 65.6 | 66.7 | 67.8 | 68.8 | 72.4 | 70.2 | 70.5 | 71.6 | 77.3 | 82.9 | 82.8 | 79.3 | 71.2 | 157.2 |
| 80 | 65.9 | 67.5 | 69.5 | 71.0 | 82.7 | 71.9 | 71.5 | 73.8 | 79.9 | 84.2 | 82.4 | 77.1 | 67.8 | 158.1 |
| 100 | 68.3 | 69.7 | 71.4 | 71.9 | 71.5 | 72.7 | 73.3 | 74.9 | 81.0 | 84.4 | 82.7 | 76.0 | 66.8 | 157.8 |
| 125 | 68.8 | 68.5 | 70.9 | 71.7 | 72.6 | 73.5 | 74.1 | 75.8 | 81.4 | 84.2 | 82.8 | 74.8 | 66.3 | 158.0 |
| 160 | 69.7 | 69.2 | 72.4 | 73.2 | 73.9 | 75.1 | 74.9 | 77.3 | 82.3 | 83.9 | 81.9 | 73.5 | 66.3 | 158.1 |
| 200 | 68.5 | 70.6 | 72.8 | 73.3 | 74.2 | 75.9 | 75.8 | 77.9 | 82.3 | 84.2 | 81.5 | 73.0 | 66.8 | 158.4 |
| 250 | 70.5 | 69.8 | 72.3 | 73.7 | 73.8 | 75.4 | 75.8 | 77.9 | 82.2 | 85.3 | 81.3 | 72.2 | 66.3 | 159.0 |
| 315 | 68.7 | 70.0 | 72.6 | 73.7 | 74.7 | 76.0 | 77.1 | 79.0 | 83.0 | 84.1 | 81.2 | 73.5 | 65.9 | 159.3 |
| 400 | 69.1 | 70.5 | 72.2 | 74.3 | 75.2 | 76.7 | 76.8 | 79.5 | 81.9 | 83.5 | 80.3 | 72.7 | 64.9 | 159.3 |
| 500 | 69.1 | 70.4 | 72.2 | 73.8 | 74.2 | 76.1 | 76.7 | 78.9 | 81.8 | 83.4 | 80.5 | 73.0 | 64.9 | 159.7 |
| 630 | 68.5 | 70.0 | 72.4 | 74.0 | 75.0 | 76.9 | 77.3 | 79.7 | 82.0 | 83.3 | 80.6 | 73.2 | 65.3 | 160.4 |
| 800 | 68.3 | 69.3 | 71.8 | 73.2 | 74.5 | 77.5 | 77.7 | 79.4 | 82.2 | 82.5 | 80.4 | 72.6 | 64.9 | 160.7 |
| 1000 | 68.0 | 70.0 | 72.2 | 73.3 | 75.3 | 77.2 | 77.3 | 79.4 | 81.0 | 81.8 | 78.5 | 72.1 | 64.4 | 160.7 |
| 1250 | 68.9 | 70.8 | 72.3 | 74.3 | 75.6 | 78.1 | 76.6 | 78.8 | 79.6 | 76.5 | 70.9 | 63.2 | 160.4 | |
| 1600 | 68.0 | 69.9 | 73.0 | 74.4 | 75.6 | 76.7 | 75.4 | 77.1 | 78.2 | 78.9 | 73.6 | 68.4 | 60.0 | 160.5 |
| 2000 | 63.1 | 68.4 | 71.3 | 73.4 | 75.7 | 76.4 | 74.3 | 76.0 | 75.9 | 75.3 | 70.9 | 65.4 | 56.6 | 160.5 |
| 2500 | 59.5 | 64.6 | 68.4 | 69.5 | 73.1 | 74.4 | 71.2 | 72.6 | 73.7 | 71.0 | 66.6 | 59.7 | 50.8 | 160.0 |
| 3150 | 50.5 | 59.7 | 63.0 | 65.0 | 69.3 | 70.0 | 67.5 | 66.5 | 68.7 | 66.1 | 59.8 | 50.6 | 37.9 | 159.2 |
| 4000 | 42.8 | 50.2 | 56.5 | 60.2 | 60.9 | 61.3 | 60.0 | 59.8 | 61.1 | 56.6 | 49.8 | 37.7 | 20.3 | 158.3 |
| 5000 | 30.1 | 38.3 | 46.6 | 49.4 | 54.3 | 54.0 | 50.4 | 50.0 | 50.1 | 42.6 | 33.8 | 18.9 | | 157.8 |
| 6300 | 7.6 | 18.8 | 28.7 | 32.3 | 35.9 | 36.8 | 34.8 | 32.0 | 33.6 | 21.9 | 10.3 | | | 156.1 |
| 8000 | | | | | | | | | | | | | | 154.8 |
| 10000 | | | | | | | | | | | | | | 153.5 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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OASPL 80.4 81.9 84.1 85.5 88.1 88.2 88.0 90.0 90.0 93.3 95.4 93.2 87.4 79.6 172.7

PNL 86.5 89.7 92.6 94.3 96.5 97.4 98.2 97.8 99.8 100.7 97.3 90.3 81.8

PNLT 87.6 89.7 92.6 94.3 97.8 98.5 98.2 97.8 100.4 100.7 97.3 90.3 81.8

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

| | | | |
|-----------------------|-------------------|--------------|--------------|
| TEST DATE 02-27-78 | TAPE NO. N299 | ALPHA SB59 | TAMB 38.00 |
| LOCATION C41 ANECH CH | AERO. RDG. ADH114 | PAMB 29.3300 | RELHUM 53.60 |

| | | | | |
|------------|-----------------|--|-------------------------------------|---|
| MODEL 7000 | TEST POINT 7010 | ACOUSTIC RANGE 731.5 M (2400.0 FT) SL | 9032.2 SQ CM (1400.00 SQ IN) - FULL | FREE-JET SPEED 89.61 M/SEC (294.0 FPS) |
|------------|-----------------|--|-------------------------------------|---|

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X70110
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. FNL

FREQ
50
63
80

100

125

160

200

250 77.9 79.6 80.4 81.9 82.6 83.9 86.2 88.1 90.8 97.8 102.5 105.7 104.1 138.6
315 79.5 80.8 82.1 82.2 83.5 86.0 88.0 88.3 93.0 100.0 103.4 106.3 102.5 139.2
400 81.0 81.2 82.3 82.8 84.1 86.5 87.1 89.1 94.3 103.0 105.7 105.6 99.5 140.1
500 80.8 82.1 83.4 83.9 89.9 87.4 88.6 90.7 95.7 104.1 106.5 104.2 96.1 140.4
630 81.7 83.2 84.7 84.8 100.8 88.3 89.9 92.9 97.8 106.2 106.1 101.0 92.4 141.0
800 84.3 83.5 85.6 86.6 87.2 89.3 91.0 94.4 99.9 106.2 105.9 97.5 90.7 140.7
1000 85.1 84.4 87.2 87.0 88.3 90.9 92.1 95.2 101.5 106.3 104.7 94.8 88.5 140.7
1250 84.7 86.3 87.8 88.6 89.2 91.8 92.9 96.6 101.6 105.9 104.8 94.4 88.1 140.7
1600 86.6 85.4 87.2 88.2 89.6 92.2 94.3 97.5 102.5 105.5 104.0 94.5 87.5 140.6
2000 85.5 86.0 87.8 88.3 89.6 92.2 93.9 96.1 103.0 106.1 102.3 93.5 88.5 140.7
2500 86.1 87.4 88.2 88.9 90.3 92.6 95.3 98.7 102.4 106.5 103.5 93.9 87.9 141.1
3150 86.7 87.2 88.0 90.0 90.8 93.7 95.6 99.5 103.2 105.6 102.8 95.5 87.5 141.1
4000 86.6 86.9 88.6 89.4 90.4 93.6 95.5 99.1 102.1 104.6 102.9 95.1 87.9 140.6
5000 86.8 86.9 89.1 89.4 90.9 94.3 96.4 99.4 102.4 104.8 102.4 94.8 88.6 140.8
6300 87.7 88.1 89.1 89.6 91.3 94.9 96.1 99.4 102.2 104.3 101.8 95.3 89.8 140.8
8000 88.6 89.3 89.5 89.8 91.6 93.9 95.8 99.1 101.9 103.3 101.5 95.9 89.6 140.8
10000 87.1 89.3 90.7 90.5 92.1 95.0 95.1 98.5 101.0 102.8 100.8 96.0 90.1 140.8
12500 84.5 87.3 88.5 89.7 91.4 93.1 94.0 96.7 99.1 100.4 98.4 94.5 88.7 139.7
16000 83.1 85.3 87.2 89.4 91.7 93.2 93.2 95.9 97.3 99.6 96.0 93.3 88.0 140.0
20000 78.3 83.0 84.6 86.2 90.1 92.0 90.4 93.1 95.0 96.1 92.9 90.7 86.4 139.0
25000 78.1 79.8 82.1 83.0 87.2 89.1 87.2 88.3 92.2 91.4 88.9 86.6 84.6 137.8
31500 75.8 76.3 80.2 81.9 82.9 83.9 83.8 85.2 88.8 88.9 86.3 82.0 79.5 137.7
40000 71.7 71.4 74.3 76.4 80.7 81.4 78.3 80.1 83.3 83.3 81.1 76.4 75.1 136.9
50000 64.1 64.8 67.5 70.5 72.4 74.1 73.6 72.6 78.3 75.4 74.5 71.2 68.8 134.7
63000 58.8 58.7 60.6 63.5 64.2 65.4 67.4 65.9 73.0 68.3 67.6 65.3 63.0 133.5
80000 52.9 52.6 55.1 58.4 56.7 60.3 58.9 59.5 65.3 61.2 61.7 56.8 54.4 133.3

OASPL 98.2 99.0 100.4 101.2 104.9 105.3 106.6 109.9 113.6 117.3 116.4 113.0 108.4 153.9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 5859 TAPB 38.00
LOCATION C41 ANECH CH AERO. RDG. ADH113 PAMB 29.3300 RELHUM 53.50

MODEL TEST POINT 7011 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 118.26 M/SEC (388.0 FPS) FREE-JET SPEED

ORIGINAL PAGE IS
OF POOR QUALITY

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.W. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X70110

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 85.3 | 85.9 | 85.1 | 85.0 | 84.3 | 83.9 | 84.3 | 84.6 | 90.3 | 96.3 | 99.1 | 102.5 | 100.4 | 135.8 |
| 315 | 85.3 | 85.9 | 85.1 | 85.0 | 85.3 | 86.2 | 85.1 | 86.2 | 92.3 | 100.5 | 103.1 | 104.1 | 100.7 | 138.2 |
| 400 | 87.0 | 87.0 | 86.9 | 86.5 | 86.9 | 86.8 | 86.2 | 87.1 | 93.3 | 101.2 | 103.7 | 102.9 | 98.5 | 138.2 |
| 500 | 88.1 | 87.2 | 87.0 | 86.0 | 91.7 | 87.7 | 88.4 | 88.4 | 95.4 | 102.2 | 103.1 | 100.0 | 96.1 | 138.0 |
| 630 | 88.2 | 88.3 | 88.3 | 87.3 | 103.2 | 88.6 | 88.6 | 88.8 | 90.4 | 97.8 | 103.6 | 103.4 | 97.4 | 140.2 |
| 800 | 91.8 | 91.6 | 91.3 | 89.3 | 89.2 | 89.8 | 89.9 | 92.0 | 99.6 | 104.2 | 102.9 | 96.0 | 96.5 | 139.2 |
| 1000 | 91.6 | 89.7 | 90.4 | 90.0 | 90.4 | 91.5 | 91.2 | 93.0 | 100.1 | 104.0 | 103.2 | 95.8 | 96.3 | 139.3 |
| 1250 | 92.5 | 90.7 | 92.1 | 90.5 | 91.4 | 92.5 | 92.2 | 94.5 | 101.2 | 103.9 | 102.7 | 96.2 | 96.0 | 139.6 |
| 1600 | 92.2 | 92.5 | 92.8 | 92.2 | 92.2 | 93.1 | 93.8 | 95.6 | 102.1 | 104.8 | 101.4 | 95.6 | 97.4 | 140.1 |
| 2000 | 94.0 | 91.7 | 92.2 | 91.9 | 92.2 | 93.5 | 93.6 | 96.5 | 101.9 | 105.6 | 102.9 | 96.4 | 97.2 | 140.7 |
| 2500 | 92.9 | 92.3 | 92.9 | 92.1 | 93.1 | 94.1 | 95.3 | 97.5 | 103.2 | 105.2 | 102.8 | 98.5 | 97.3 | 141.1 |
| 3150 | 93.5 | 93.8 | 93.4 | 93.0 | 93.9 | 95.6 | 96.1 | 98.7 | 102.7 | 105.0 | 103.5 | 98.6 | 98.1 | 141.4 |
| 4000 | 94.0 | 93.6 | 93.3 | 94.2 | 94.0 | 96.0 | 96.5 | 98.9 | 103.2 | 105.1 | 103.0 | 98.4 | 98.8 | 141.7 |
| 5000 | 93.8 | 93.3 | 94.2 | 93.8 | 95.5 | 97.3 | 97.9 | 99.5 | 103.2 | 104.9 | 102.8 | 99.4 | 101.0 | 142.1 |
| 6300 | 96.7 | 95.6 | 95.5 | 95.2 | 95.9 | 97.9 | 97.7 | 99.5 | 103.2 | 104.3 | 102.9 | 100.5 | 101.6 | 142.5 |
| 8000 | 97.5 | 96.7 | 96.3 | 95.3 | 95.5 | 96.9 | 97.4 | 99.4 | 102.8 | 104.3 | 102.9 | 101.4 | 102.8 | 143.0 |
| 10000 | 95.5 | 95.5 | 94.8 | 94.2 | 96.1 | 98.0 | 97.0 | 99.0 | 101.6 | 102.6 | 101.2 | 100.7 | 102.1 | 142.6 |
| 12500 | 93.7 | 95.2 | 95.8 | 94.7 | 95.4 | 96.1 | 96.2 | 97.6 | 100.6 | 102.8 | 99.8 | 100.4 | 102.1 | 142.6 |
| 16000 | 90.5 | 92.7 | 93.0 | 93.3 | 96.3 | 96.2 | 95.4 | 97.1 | 99.4 | 100.2 | 97.5 | 98.2 | 100.7 | 142.6 |
| 20000 | 91.4 | 92.5 | 93.0 | 93.7 | 94.7 | 95.0 | 92.8 | 94.8 | 95.2 | 94.0 | 91.7 | 92.3 | 97.1 | 141.5 |
| 25000 | 86.1 | 89.6 | 90.0 | 89.9 | 91.8 | 92.1 | 88.7 | 88.3 | 94.6 | 94.5 | 92.4 | 91.1 | 95.4 | 141.6 |
| 31500 | 85.1 | 85.6 | 86.5 | 85.9 | 87.4 | 86.9 | 86.2 | 86.9 | 90.0 | 89.5 | 87.3 | 85.3 | 90.5 | 140.5 |
| 40000 | 81.9 | 81.2 | 83.8 | 84.0 | 85.3 | 84.4 | 80.6 | 81.9 | 84.8 | 81.4 | 80.6 | 80.0 | 84.2 | 140.2 |
| 50000 | 77.4 | 75.9 | 77.5 | 78.0 | 76.9 | 77.1 | 75.6 | 73.8 | 79.6 | 74.4 | 74.1 | 74.4 | 78.8 | 138.3 |
| 63000 | 68.9 | 68.4 | 69.8 | 71.3 | 68.2 | 68.4 | 68.1 | 66.5 | 75.0 | 70.6 | 71.4 | 59.4 | 73.7 | 137.3 |
| 80000 | 59.4 | 58.6 | 59.9 | 61.7 | 61.2 | 63.3 | 61.3 | 61.3 | 65.2 | 60.8 | 61.6 | 59.6 | 63.8 | 135.4 |
| GASPL | 106.0 | 105.8 | 105.9 | 105.5 | 108.1 | 107.6 | 107.5 | 109.4 | 113.9 | 116.5 | 115.3 | 112.7 | 112.6 | 154.7 |

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000
 FREE JET VELOCITY (FT/SEC) 388.00 REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 3859 TAMB 38.00
 LOCATION C41 ANECH CH AERG. RDG. ADH113 PAMB 29.3300 RELHUM 53.60

MODEL TEST POINT 7000 12.2 M (40.0 FT) ARC 154.7 SQ CH (23.99 SQ IN) - MODEL 118.26 M/SEC (388.0 FPS)
 ACUSTIC RANGE SIZE FREE-JET SPEED

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07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMCDL X70111

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 65.2 | 66.8 | 67.7 | 67.0 | 67.6 | 68.8 | 68.2 | 68.7 | 74.1 | 81.0 | 81.9 | 78.9 | 71.2 | 155.9 |
| 63 | 66.3 | 66.9 | 67.8 | 67.6 | 67.6 | 69.7 | 69.6 | 70.0 | 76.2 | 81.9 | 81.3 | 76.0 | 68.7 | 155.7 |
| 80 | 66.4 | 68.0 | 69.0 | 68.7 | 65.1 | 70.7 | 70.7 | 71.9 | 78.6 | 83.3 | 81.5 | 73.3 | 68.6 | 157.8 |
| 100 | 69.9 | 71.3 | 72.0 | 70.7 | 71.0 | 71.8 | 71.8 | 73.4 | 80.5 | 83.8 | 81.0 | 71.9 | 68.8 | 156.9 |
| 125 | 69.6 | 69.3 | 71.1 | 71.4 | 72.2 | 73.4 | 73.0 | 74.3 | 80.7 | 83.5 | 81.2 | 71.5 | 68.4 | 157.0 |
| 160 | 70.3 | 70.0 | 72.6 | 71.7 | 73.0 | 74.3 | 73.9 | 75.7 | 81.7 | 83.3 | 80.5 | 71.6 | 67.7 | 157.3 |
| 200 | 69.7 | 71.7 | 73.1 | 73.3 | 73.7 | 74.8 | 75.3 | 76.7 | 82.4 | 83.9 | 78.9 | 70.6 | 68.7 | 157.8 |
| 250 | 71.2 | 70.6 | 72.3 | 72.8 | 73.5 | 74.9 | 74.9 | 77.3 | 82.0 | 84.5 | 80.1 | 71.0 | 67.9 | 158.4 |
| 315 | 69.6 | 70.9 | 72.7 | 72.7 | 74.1 | 75.3 | 76.4 | 78.0 | 82.9 | 83.7 | 79.5 | 72.6 | 67.1 | 158.7 |
| 400 | 69.8 | 71.9 | 72.8 | 73.2 | 74.7 | 76.5 | 76.8 | 79.0 | 82.1 | 83.1 | 79.8 | 72.0 | 66.9 | 159.1 |
| 500 | 69.8 | 71.4 | 72.4 | 74.2 | 74.4 | 76.6 | 76.9 | 78.9 | 82.3 | 82.9 | 78.8 | 71.2 | 66.7 | 159.3 |
| 630 | 69.1 | 70.7 | 72.9 | 73.5 | 75.6 | 77.6 | 78.1 | 79.1 | 82.0 | 82.3 | 78.1 | 71.6 | 67.8 | 159.8 |
| 800 | 71.4 | 72.6 | 73.9 | 74.6 | 75.8 | 77.1 | 77.6 | 78.9 | 81.7 | 81.2 | 77.7 | 72.0 | 67.2 | 160.2 |
| 1000 | 71.8 | 73.4 | 74.6 | 74.5 | 75.3 | 76.9 | 77.2 | 78.6 | 81.1 | 81.0 | 77.2 | 72.2 | 67.3 | 160.6 |
| 1250 | 69.4 | 71.9 | 72.8 | 73.3 | 75.7 | 77.8 | 76.7 | 78.1 | 79.6 | 79.0 | 75.1 | 70.7 | 65.1 | 160.2 |
| 1600 | 66.7 | 71.0 | 73.4 | 73.4 | 74.8 | 75.6 | 75.5 | 76.3 | 78.2 | 78.6 | 72.8 | 69.0 | 62.8 | 160.4 |
| 2000 | 62.5 | 67.8 | 70.2 | 71.8 | 75.5 | 75.6 | 74.7 | 75.6 | 76.6 | 75.4 | 69.5 | 65.2 | 58.3 | 160.3 |
| 2500 | 61.6 | 66.5 | 69.3 | 71.5 | 73.3 | 73.9 | 71.5 | 72.6 | 71.5 | 67.9 | 61.9 | 56.5 | 49.9 | 159.2 |
| 3150 | 52.9 | 61.1 | 64.4 | 66.2 | 69.0 | 69.7 | 65.9 | 64.6 | 69.0 | 66.0 | 59.2 | 50.2 | 39.8 | 159.2 |
| 4000 | 45.7 | 52.4 | 57.1 | 58.9 | 61.7 | 61.6 | 60.5 | 59.9 | 60.6 | 56.2 | 48.0 | 35.6 | 20.4 | 158.1 |
| 5000 | 32.8 | 40.4 | 48.2 | 51.6 | 54.6 | 54.3 | 49.9 | 49.4 | 49.2 | 40.6 | 31.4 | 16.5 | | 157.9 |
| 6300 | 10.5 | 20.9 | 29.8 | 34.8 | 36.1 | 37.1 | 34.8 | 30.6 | 31.9 | 19.4 | 7.2 | | | 155.9 |
| 8000 | | 0.8 | 8.8 | 8.8 | 9.3 | 10.6 | 10.2 | 4.0 | 6.0 | | | | | 154.9 |
| 10000 | | | | | | | | | | | | | | 153.0 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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|-------|------|------|------|------|------|------|------|------|------|-------|------|------|------|-------|
| CASPL | 81.6 | 83.2 | 84.7 | 85.1 | 86.9 | 87.9 | 87.8 | 89.2 | 93.1 | 94.7 | 91.7 | 85.1 | 80.0 | 172.3 |
| PNL | 87.6 | 90.8 | 93.0 | 94.2 | 96.5 | 97.0 | 96.1 | 97.2 | 99.7 | 100.1 | 95.8 | 89.4 | 83.7 | |
| PNLT | 88.6 | 90.8 | 94.1 | 95.3 | 97.7 | 98.1 | 96.6 | 97.2 | 99.7 | 100.1 | 95.8 | 89.4 | 84.7 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 IALPHA SB59 TAMB 38.00
LOCATION C41 ANECH CH AERO. RDG. ADH113 PAMB 29.3300 RELHUM 53.50

MODEL TEST POINT 7011 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 118.26 M/SEC (388.0 FPS) FREE-JET SPEED

08/30/79 19.452

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X70120
 BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

10000000

12500000

16000000

20000000

25000000

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TEST DATE 02-21-78 TAPE NO. N294 IALPHA SB59 TAMB 24.80
 LOCATION C41 ANECH CH AERO. RDG. ADH091 PAMB 29.3620 RELHUM 41.00

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
 7000 7012 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. M/SEC (0. FPS)

GASPL 105.7 108.6 108.8 109.2 110.5 112.6 113.3 116.5 122.2 124.8 126.5 129.6 124.7 163.7

08/30/79 19.452

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X70120

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

| | | | | | | | | | | | | | | |
|-----|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | 55.3 | 59.9 | 58.8 | 59.4 | 90.0 | 92.1 | 94.5 | 98.6 | 100.8 | 105.6 | 110.0 | 114.5 | 112.9 | 147.0 |
| 60 | 56.1 | 59.2 | 59.4 | 59.7 | 92.1 | 93.7 | 94.3 | 96.5 | 103.4 | 108.2 | 111.9 | 116.6 | 113.2 | 148.8 |
| 70 | 56.4 | 59.4 | 91.2 | 90.7 | 91.8 | 94.2 | 95.6 | 97.2 | 104.5 | 111.5 | 114.2 | 118.3 | 113.8 | 150.6 |
| 80 | 56.7 | 91.3 | 92.0 | 91.8 | 93.2 | 95.5 | 96.4 | 98.6 | 105.5 | 112.4 | 115.5 | 119.7 | 114.3 | 151.4 |
| 90 | 56.8 | 92.4 | 92.9 | 97.3 | 96.1 | 97.5 | 100.7 | 107.4 | 112.2 | 115.4 | 119.0 | 115.2 | 151.7 | |
| 100 | 56.8 | 93.2 | 93.9 | 94.5 | 95.3 | 97.9 | 99.1 | 102.2 | 109.2 | 113.3 | 115.4 | 119.8 | 115.2 | 152.3 |
| 110 | 56.7 | 96.3 | 97.0 | 96.1 | 96.4 | 98.8 | 99.9 | 103.1 | 110.5 | 113.1 | 114.5 | 118.9 | 114.3 | 151.9 |
| 120 | 93.1 | 97.1 | 97.4 | 97.2 | 97.8 | 100.4 | 101.0 | 103.9 | 110.3 | 112.5 | 115.6 | 119.8 | 114.2 | 152.4 |
| 130 | 95.2 | 95.5 | 95.8 | 96.6 | 97.7 | 100.3 | 101.7 | 104.8 | 111.5 | 113.7 | 116.1 | 120.1 | 114.3 | 152.9 |
| 140 | 95.4 | 97.7 | 97.4 | 97.2 | 97.3 | 99.6 | 101.0 | 104.7 | 112.1 | 114.3 | 116.0 | 118.4 | 111.7 | 152.3 |
| 150 | 94.8 | 96.1 | 97.1 | 97.4 | 98.2 | 100.1 | 102.4 | 105.1 | 111.5 | 114.7 | 115.7 | 117.1 | 110.3 | 151.9 |
| 160 | 95.3 | 96.2 | 96.7 | 97.7 | 98.0 | 100.9 | 102.2 | 105.4 | 112.3 | 113.6 | 114.5 | 115.6 | 108.9 | 151.2 |
| 170 | 94.9 | 97.0 | 96.8 | 96.8 | 97.6 | 100.4 | 102.1 | 105.8 | 111.4 | 112.7 | 113.3 | 113.5 | 106.7 | 150.1 |
| 180 | 94.0 | 97.4 | 97.2 | 97.1 | 98.2 | 100.8 | 102.5 | 105.9 | 110.3 | 112.3 | 112.2 | 112.6 | 105.8 | 149.6 |
| 190 | 93.8 | 97.9 | 97.7 | 98.2 | 98.7 | 101.8 | 102.5 | 105.4 | 110.1 | 111.8 | 111.1 | 111.7 | 105.8 | 149.3 |
| 200 | 92.9 | 98.3 | 97.9 | 98.3 | 99.4 | 101.3 | 101.6 | 104.8 | 109.1 | 110.2 | 110.0 | 110.4 | 104.7 | 148.6 |
| 210 | 91.1 | 95.9 | 97.6 | 98.7 | 99.8 | 101.7 | 101.1 | 104.4 | 108.0 | 109.8 | 108.4 | 109.0 | 103.3 | 148.3 |
| 220 | 88.6 | 94.8 | 95.2 | 97.0 | 98.8 | 100.5 | 100.4 | 102.5 | 105.4 | 106.7 | 106.4 | 107.4 | 101.2 | 147.0 |
| 230 | 86.4 | 93.1 | 95.2 | 96.0 | 98.2 | 100.0 | 98.9 | 101.5 | 103.2 | 105.5 | 103.8 | 104.8 | 100.3 | 146.7 |
| 240 | 81.6 | 89.7 | 92.0 | 94.1 | 97.1 | 98.5 | 96.1 | 98.7 | 100.8 | 101.8 | 101.0 | 101.5 | 97.7 | 145.7 |
| 250 | 80.2 | 86.0 | 89.0 | 89.4 | 94.5 | 95.8 | 93.2 | 93.7 | 96.3 | 96.9 | 97.4 | 98.6 | 95.2 | 144.7 |
| 260 | 76.7 | 82.5 | 86.5 | 88.4 | 89.5 | 90.0 | 89.4 | 90.9 | 93.6 | 96.1 | 93.9 | 92.2 | 89.5 | 144.1 |
| 270 | 73.7 | 77.5 | 81.0 | 82.9 | 86.9 | 87.9 | 83.7 | 85.5 | 89.0 | 90.6 | 89.1 | 87.0 | 84.9 | 143.5 |
| 280 | 66.3 | 70.3 | 73.6 | 76.3 | 78.7 | 80.2 | 79.2 | 78.6 | 84.9 | 84.9 | 83.7 | 81.7 | 79.1 | 142.0 |
| 290 | 61.0 | 64.4 | 68.8 | 69.4 | 70.3 | 71.4 | 74.2 | 72.6 | 80.2 | 79.1 | 77.9 | 77.4 | 73.5 | 141.6 |
| 300 | 55.0 | 57.5 | 61.2 | 64.4 | 63.9 | 65.3 | 66.8 | 67.0 | 74.4 | 73.7 | 73.1 | 71.3 | 66.6 | 142.7 |

GASPL 105.7 108.6 108.8 109.2 110.5 112.6 113.3 116.5 122.2 124.8 126.5 129.6 124.7 163.7

MODEL/FULL SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES
INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-21-78 TAPE NO. N294 ALPHA S859 TAPB 24.80
LOCATION C41 ANECH CH AERO. RDG. ADH091 PAMB 29.3620 RELNUM 41.00

MODEL TEST POINT 7012 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X70121

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 68.6 | 70.2 | 72.0 | 72.3 | 73.6 | 76.3 | 77.5 | 78.8 | 85.3 | 91.3 | 92.4 | 94.4 | 96.4 | 168.3 |
| 63 | 68.9 | 71.0 | 72.8 | 73.4 | 75.1 | 77.6 | 78.4 | 80.1 | 86.3 | 92.1 | 93.7 | 94.7 | 97.0 | 169.0 |
| 80 | 68.0 | 72.3 | 73.2 | 74.4 | 79.2 | 78.2 | 79.4 | 82.2 | 88.2 | 91.9 | 93.5 | 94.9 | 97.7 | 169.4 |
| 100 | 71.4 | 72.8 | 74.6 | 75.9 | 77.2 | 79.9 | 80.9 | 83.7 | 89.9 | 92.9 | 93.4 | 95.6 | 97.6 | 170.0 |
| 125 | 73.7 | 75.8 | 77.7 | 77.4 | 78.2 | 80.7 | 81.7 | 84.4 | 91.2 | 92.6 | 92.4 | 94.6 | 96.5 | 169.5 |
| 160 | 70.8 | 76.5 | 77.9 | 78.4 | 79.4 | 82.2 | 82.7 | 85.2 | 90.8 | 91.9 | 93.4 | 95.2 | 96.0 | 170.1 |
| 200 | 72.7 | 74.7 | 76.1 | 77.7 | 79.2 | 81.9 | 83.2 | 85.9 | 91.8 | 92.8 | 93.6 | 95.2 | 95.6 | 170.6 |
| 250 | 72.6 | 76.6 | 77.5 | 78.0 | 78.6 | 81.1 | 82.3 | 85.5 | 92.2 | 93.2 | 93.2 | 93.1 | 92.3 | 170.0 |
| 315 | 71.8 | 74.6 | 76.9 | 78.0 | 79.2 | 81.2 | 83.5 | 85.7 | 91.3 | 93.3 | 92.4 | 91.2 | 80.2 | 169.6 |
| 400 | 71.6 | 76.3 | 76.1 | 77.9 | 78.7 | 81.7 | 83.0 | 86.7 | 91.7 | 91.7 | 90.7 | 89.1 | 77.7 | 168.9 |
| 500 | 70.7 | 74.8 | 75.9 | 76.7 | 78.0 | 81.1 | 82.5 | 85.7 | 90.5 | 90.4 | 89.1 | 86.3 | 74.6 | 167.8 |
| 630 | 69.3 | 74.8 | 75.9 | 76.8 | 78.4 | 81.2 | 82.6 | 85.6 | 89.1 | 89.7 | 87.5 | 84.7 | 72.6 | 167.2 |
| 800 | 68.6 | 74.9 | 76.2 | 77.6 | 78.6 | 81.9 | 82.4 | 84.8 | 88.6 | 88.8 | 85.9 | 83.1 | 71.5 | 167.0 |
| 1000 | 67.3 | 75.0 | 76.2 | 77.5 | 79.2 | 81.2 | 81.4 | 84.1 | 87.3 | 86.9 | 84.4 | 81.2 | 69.2 | 166.3 |
| 1250 | 64.9 | 72.3 | 75.6 | 77.8 | 79.5 | 81.5 | 80.8 | 83.5 | 86.0 | 86.1 | 82.3 | 78.9 | 66.4 | 166.0 |
| 1600 | 61.6 | 70.5 | 72.7 | 75.7 | 78.2 | 80.0 | 79.8 | 81.2 | 83.0 | 82.5 | 79.4 | 76.0 | 61.9 | 164.7 |
| 2000 | 58.4 | 68.3 | 72.4 | 74.5 | 77.4 | 79.4 | 78.1 | 80.0 | 80.4 | 80.6 | 75.8 | 71.8 | 58.0 | 164.4 |
| 2500 | 51.8 | 63.6 | 68.3 | 71.9 | 75.8 | 77.4 | 74.8 | 76.5 | 77.1 | 75.8 | 71.2 | 65.6 | 50.5 | 163.4 |
| 3150 | 47.0 | 57.5 | 63.5 | 65.6 | 71.8 | 73.2 | 70.5 | 69.9 | 72.7 | 68.4 | 64.3 | 57.8 | 39.6 | 162.4 |
| 4000 | 39.3 | 49.3 | 57.1 | 61.4 | 63.8 | 64.7 | 63.7 | 63.9 | 64.2 | 62.9 | 54.6 | 42.4 | 19.4 | 161.8 |
| 5000 | 24.6 | 36.7 | 45.4 | 50.5 | 56.2 | 57.8 | 53.0 | 53.1 | 53.4 | 49.8 | 40.0 | 23.5 | 161.2 | |
| 6300 | | 15.3 | 25.9 | 33.1 | 37.9 | 40.2 | 38.4 | 35.4 | 37.2 | 29.8 | 16.7 | | 159.6 | |
| 8000 | | | | 6.9 | 11.3 | 13.6 | 15.3 | 10.1 | 11.1 | | | | 159.3 | |
| 10000 | | | | | | | | | | | | | 160.4 | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-21-78 TAPE NO. N294. IALPHA SB59 TAMB 24.80
 LOCATION C41 ANECH CH AERO. RDG. ADH091 PAMB 29.3620 RELHUM 41.00

MODEL TEST POINT 7012 ACOUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)
 FREE-JET SPEED

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X70130
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

103.6

104.4

105.6

106.0

107.8

109.9

110.6

114.2

120.1

122.8

123.5

120.4

114.8

159.9

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OF POOR QUALITY

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 28.40
LOCATION C41 ANECH CH AERO. RDG. ADH103 PAMB 29.5400 RELHUM 44.00

MODEL TEST POINT 7013 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 89.31 M/SEC (293.0 FPS) FREE-JET SPEED

517

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB. 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X70130

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

40000

50000

63000

80000

GASPL

108.9

109.1

109.5

109.8

110.7

111.8

111.2

113.7

120.1

122.2

122.6

120.0

116.4

160.1

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 293.00 REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMS 28.40
 LOCATION C41 ANECH CH AERO. RDG. ADH105 PAMS 29.5400 RELHUM 44.00

MODEL TEST POINT 7000 7013 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 89.31 M/SEC (293.0 FPS) FREE-JET SPEED

02/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X70131

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 67.1 | 69.0 | 70.0 | 70.4 | 70.6 | 72.7 | 72.6 | 73.7 | 81.4 | 87.5 | 89.2 | 87.3 | 79.8 | 163.2 |
| 63 | 68.2 | 69.8 | 71.3 | 71.6 | 73.4 | 74.3 | 75.2 | 75.9 | 83.3 | 87.2 | 89.5 | 87.0 | 78.3 | 163.2 |
| 80 | 68.9 | 70.0 | 71.8 | 73.5 | 81.7 | 75.1 | 77.2 | 85.9 | 88.3 | 89.1 | 85.6 | 85.6 | 76.4 | 163.4 |
| 100 | 71.6 | 72.4 | 73.9 | 74.4 | 74.8 | 76.4 | 76.6 | 78.8 | 87.3 | 88.7 | 87.8 | 83.5 | 73.7 | 163.0 |
| 125 | 72.3 | 71.3 | 73.4 | 74.5 | 75.4 | 77.3 | 77.9 | 79.6 | 87.6 | 88.3 | 86.1 | 81.9 | 71.9 | 162.9 |
| 160 | 72.9 | 72.2 | 74.9 | 76.5 | 77.0 | 78.8 | 78.4 | 80.6 | 88.7 | 88.9 | 88.8 | 80.8 | 71.8 | 163.8 |
| 200 | 71.5 | 74.2 | 76.1 | 75.8 | 77.3 | 79.5 | 79.6 | 81.0 | 89.1 | 89.6 | 88.6 | 80.1 | 72.1 | 164.3 |
| 250 | 73.6 | 72.8 | 75.1 | 75.8 | 76.5 | 78.5 | 79.1 | 81.5 | 88.8 | 90.2 | 88.2 | 80.3 | 72.4 | 164.6 |
| 315 | 72.6 | 73.6 | 75.7 | 76.3 | 77.1 | 79.3 | 80.5 | 82.6 | 89.1 | 90.0 | 88.4 | 79.9 | 72.2 | 165.1 |
| 400 | 71.5 | 73.6 | 75.8 | 77.0 | 77.3 | 80.1 | 80.5 | 83.4 | 88.5 | 88.9 | 86.7 | 78.5 | 70.8 | 164.7 |
| 500 | 72.3 | 74.3 | 75.1 | 76.2 | 77.4 | 80.0 | 80.1 | 82.8 | 88.3 | 88.7 | 86.6 | 77.6 | 69.5 | 165.0 |
| 630 | 73.8 | 74.1 | 76.0 | 77.4 | 78.2 | 80.0 | 80.4 | 83.1 | 88.5 | 88.5 | 85.3 | 77.2 | 69.7 | 165.3 |
| 800 | 74.3 | 75.5 | 76.9 | 79.2 | 78.9 | 81.2 | 80.4 | 83.1 | 88.1 | 87.6 | 84.1 | 74.6 | 68.4 | 165.3 |
| 1000 | 74.4 | 76.6 | 78.1 | 79.5 | 79.8 | 81.5 | 80.8 | 82.9 | 87.0 | 86.9 | 82.8 | 73.9 | 66.6 | 165.4 |
| 1250 | 72.7 | 76.7 | 78.5 | 79.2 | 80.8 | 82.6 | 80.4 | 82.0 | 84.3 | 84.3 | 80.4 | 72.4 | 64.5 | 164.7 |
| 1600 | 69.7 | 74.1 | 77.4 | 78.6 | 80.0 | 80.8 | 79.5 | 80.4 | 83.3 | 83.3 | 77.3 | 70.3 | 61.7 | 164.6 |
| 2000 | 68.3 | 73.2 | 75.1 | 77.6 | 79.3 | 80.5 | 78.2 | 79.3 | 80.5 | 79.8 | 74.0 | 66.6 | 57.0 | 164.2 |
| 2500 | 64.6 | 70.7 | 74.1 | 75.0 | 77.9 | 78.7 | 74.7 | 76.1 | 78.5 | 75.5 | 69.9 | 62.3 | 53.3 | 164.3 |
| 3150 | 55.9 | 65.3 | 68.4 | 69.3 | 74.2 | 74.6 | 71.5 | 70.4 | 72.1 | 70.2 | 64.0 | 52.2 | 38.4 | 163.2 |
| 4000 | 47.7 | 56.1 | 61.4 | 65.1 | 66.4 | 66.3 | 64.4 | 64.0 | 64.9 | 61.2 | 54.1 | 39.3 | 22.1 | 162.6 |
| 5000 | 35.4 | 43.7 | 51.8 | 53.9 | 59.1 | 59.4 | 54.3 | 53.4 | 54.6 | 46.6 | 37.5 | 19.4 | 162.2 | |
| 6300 | 12.0 | 23.8 | 33.8 | 36.5 | 40.8 | 41.9 | 39.0 | 34.7 | 38.5 | 26.8 | 13.8 | | 160.5 | |
| 8000 | | | 4.4 | 10.0 | 13.6 | 15.3 | 14.9 | 8.9 | 11.2 | | | | 159.1 | |
| 10000 | | | | | | | | | | | | | 157.6 | |

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DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-79 TAPE NO. N299 IALPHA SB59 TAPB 28.40
LOCATION C41 ANECH CH AERO. RDG. ADH105 PAMB 29.5400 RELHUM 44.00

MODEL TEST POINT 7013 ACOUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 89.31 M/SEC (293.0 FPS)
FREE-JET SPEED

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMDDL X70140
BACKGROUND FJB400-FMDDL X01400

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 81.0 | 83.5 | 84.9 | 85.5 | 87.4 | 89.1 | 91.3 | 97.0 | 102.4 | 106.6 | 109.7 | 108.1 | 142.8 | |
| 315 | 82.2 | 83.5 | 84.7 | 84.8 | 86.1 | 88.8 | 89.4 | 91.9 | 98.9 | 104.2 | 108.1 | 110.8 | 107.2 | 143.8 |
| 400 | 84.1 | 84.8 | 85.6 | 85.1 | 87.0 | 89.1 | 90.5 | 92.7 | 100.2 | 107.5 | 110.9 | 111.1 | 104.5 | 145.2 |
| 500 | 84.4 | 84.9 | 86.6 | 87.0 | 89.1 | 90.2 | 91.6 | 93.8 | 101.3 | 109.1 | 111.5 | 109.9 | 100.8 | 145.5 |
| 630 | 85.3 | 86.1 | 87.3 | 87.5 | 89.0 | 91.8 | 92.7 | 96.1 | 103.6 | 109.5 | 112.1 | 107.8 | 97.4 | 145.7 |
| 800 | 87.6 | 85.6 | 88.4 | 89.1 | 90.0 | 92.6 | 94.3 | 97.9 | 105.7 | 110.2 | 111.4 | 105.3 | 94.9 | 145.6 |
| 1000 | 88.4 | 87.0 | 89.5 | 91.1 | 94.2 | 95.1 | 98.8 | 106.8 | 110.6 | 109.5 | 101.9 | 93.0 | 145.2 | |
| 1250 | 88.3 | 89.1 | 91.1 | 91.4 | 92.2 | 94.8 | 96.2 | 107.3 | 110.0 | 109.8 | 100.5 | 92.4 | 145.3 | |
| 1600 | 90.1 | 88.0 | 89.8 | 90.8 | 92.9 | 96.0 | 97.1 | 101.1 | 108.2 | 110.6 | 110.1 | 99.8 | 92.3 | 145.9 |
| 2000 | 88.8 | 89.3 | 90.9 | 91.4 | 92.2 | 95.6 | 97.5 | 101.4 | 109.0 | 111.2 | 108.4 | 99.4 | 92.6 | 146.0 |
| 2500 | 89.3 | 89.5 | 91.3 | 91.8 | 93.1 | 95.8 | 97.7 | 102.3 | 109.0 | 111.9 | 109.6 | 100.6 | 93.1 | 146.6 |
| 3150 | 90.8 | 90.4 | 91.1 | 92.4 | 94.0 | 97.1 | 99.0 | 102.9 | 109.8 | 111.3 | 108.7 | 101.1 | 92.9 | 146.6 |
| 4000 | 92.7 | 91.3 | 92.3 | 93.3 | 95.7 | 98.6 | 103.0 | 109.2 | 110.5 | 108.1 | 101.0 | 93.2 | 146.1 | |
| 5000 | 94.1 | 94.0 | 94.3 | 94.0 | 94.3 | 97.7 | 99.0 | 103.2 | 108.9 | 111.0 | 107.8 | 100.9 | 93.7 | 146.4 |
| 6300 | 94.5 | 95.1 | 95.4 | 95.1 | 95.8 | 98.7 | 99.4 | 103.4 | 108.8 | 110.1 | 107.3 | 100.8 | 94.0 | 146.3 |
| 8000 | 93.9 | 95.4 | 95.2 | 95.6 | 96.9 | 98.5 | 99.1 | 102.9 | 108.1 | 108.8 | 106.6 | 99.4 | 93.0 | 146.0 |
| 10000 | 91.9 | 93.6 | 95.5 | 95.3 | 97.1 | 100.3 | 98.9 | 102.2 | 106.9 | 108.9 | 105.5 | 99.8 | 92.9 | 146.1 |
| 12500 | 90.5 | 92.2 | 93.4 | 93.9 | 96.2 | 98.8 | 98.5 | 100.9 | 104.9 | 106.2 | 103.1 | 98.1 | 92.5 | 144.9 |
| 16000 | 88.8 | 91.4 | 93.0 | 93.5 | 96.2 | 98.4 | 96.5 | 99.7 | 102.5 | 104.5 | 100.8 | 96.5 | 91.5 | 144.6 |
| 20000 | 84.3 | 89.0 | 89.8 | 91.3 | 95.1 | 96.9 | 94.8 | 97.2 | 99.8 | 101.4 | 97.2 | 94.4 | 89.7 | 143.8 |
| 25000 | 83.4 | 85.1 | 87.6 | 88.1 | 92.5 | 94.4 | 91.4 | 92.7 | 97.6 | 96.7 | 93.0 | 90.6 | 88.2 | 142.8 |
| 31500 | 81.7 | 81.6 | 85.1 | 86.9 | 87.2 | 89.2 | 88.8 | 89.7 | 93.4 | 94.0 | 91.2 | 88.2 | 82.2 | 142.5 |
| 40000 | 76.4 | 76.8 | 80.1 | 81.5 | 85.5 | 86.9 | 83.0 | 84.5 | 88.6 | 87.5 | 85.7 | 80.7 | 77.9 | 141.7 |
| 50000 | 69.0 | 69.7 | 71.7 | 74.8 | 77.2 | 78.7 | 77.4 | 77.2 | 83.5 | 80.5 | 79.2 | 75.9 | 72.0 | 139.4 |
| 63000 | 63.2 | 63.0 | 65.3 | 68.4 | 69.8 | 70.7 | 71.5 | 70.6 | 79.2 | 73.3 | 71.9 | 69.1 | 65.9 | 138.8 |
| 80000 | 57.2 | 56.1 | 59.6 | 62.7 | 62.7 | 64.8 | 63.4 | 64.1 | 71.7 | 68.1 | 66.7 | 60.1 | 57.8 | 138.8 |
| GASPL | 103.2 | 103.8 | 104.8 | 105.2 | 107.2 | 109.4 | 109.9 | 113.6 | 119.7 | 122.3 | 121.8 | 118.3 | 112.9 | 159.0 |

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| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | SB59 | TAMB | 29.84 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH106 | PAMB | 29.5400 | RELHUM | 43.50 |

| MODEL | TEST POINT | ACOUSTIC RANGE | ARC | 154.7 SQ CM (| 23.99 SQ IN) | MODEL | 117.35 M/SEC (| 305.0 FPS) |
|-------|------------|----------------|----------|---------------|--------------|-------|----------------|------------|
| 7000 | 7014 | 12.2 M (| 40.0 FT) | | | | | |

FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X70140

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

OASPL

110.7

110.4

110.4

109.4

110.8

111.9

110.8

113.1

119.9

121.6

120.6

117.8

116.4

159.7

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 385.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 29.84
LOCATION C41 ANECH CH AERO. RDG. ADH106 PAMB 29.5400 RELHUM 43.50

MODEL TEST POINT 7014 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.35 M/SEC (385.0 FPS) FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X70141

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|-------|-------|------|-------|-------|-------|-------|------|------|-------|
| 50 | 67.6 | 69.4 | 70.3 | 69.6 | 73.6 | 71.4 | 71.6 | 72.3 | 79.8 | 86.0 | 86.9 | 84.7 | 76.0 | 161.0 |
| 63 | 68.6 | 70.0 | 70.7 | 69.7 | 72.8 | 72.6 | 72.5 | 73.0 | 82.1 | 86.4 | 87.6 | 83.0 | 74.1 | 161.1 |
| 80 | 69.9 | 70.8 | 72.1 | 71.8 | 81.3 | 74.2 | 73.6 | 75.3 | 84.4 | 87.4 | 87.2 | 81.4 | 73.5 | 161.6 |
| 100 | 73.4 | 74.0 | 74.5 | 73.8 | 73.8 | 75.1 | 75.1 | 77.0 | 85.8 | 88.1 | 85.8 | 78.9 | 73.3 | 161.5 |
| 125 | 72.9 | 71.3 | 73.9 | 73.9 | 74.9 | 76.7 | 76.0 | 77.9 | 86.4 | 87.6 | 86.2 | 77.5 | 72.6 | 161.6 |
| 160 | 73.5 | 72.5 | 74.9 | 74.2 | 76.1 | 77.4 | 77.2 | 79.3 | 87.4 | 88.3 | 86.5 | 76.9 | 72.5 | 162.4 |
| 200 | 73.2 | 74.5 | 76.4 | 76.0 | 76.7 | 78.6 | 78.1 | 80.3 | 88.4 | 89.1 | 85.0 | 76.5 | 72.7 | 162.9 |
| 250 | 74.7 | 73.1 | 74.9 | 75.3 | 76.1 | 78.2 | 78.5 | 80.7 | 88.5 | 89.9 | 86.2 | 77.6 | 72.9 | 163.8 |
| 315 | 72.9 | 74.2 | 75.8 | 75.8 | 77.0 | 78.4 | 78.7 | 81.7 | 89.5 | 89.4 | 85.4 | 78.2 | 72.4 | 164.2 |
| 400 | 72.8 | 74.0 | 75.9 | 76.1 | 77.8 | 79.8 | 80.2 | 82.3 | 89.2 | 88.8 | 84.9 | 77.9 | 72.2 | 164.4 |
| 500 | 73.9 | 74.5 | 75.6 | 76.5 | 77.3 | 79.7 | 80.1 | 82.8 | 88.8 | 89.0 | 84.2 | 77.3 | 71.7 | 164.8 |
| 630 | 75.2 | 75.1 | 76.5 | 76.4 | 78.4 | 81.0 | 80.7 | 83.0 | 88.4 | 87.8 | 83.3 | 76.6 | 71.1 | 164.8 |
| 800 | 76.0 | 77.4 | 78.3 | 78.1 | 79.8 | 81.8 | 80.8 | 82.9 | 87.6 | 86.4 | 82.2 | 74.5 | 69.1 | 164.8 |
| 1000 | 75.8 | 78.1 | 79.1 | 78.9 | 80.6 | 81.5 | 80.3 | 82.3 | 86.3 | 86.4 | 80.9 | 74.5 | 68.0 | 165.0 |
| 1250 | 74.6 | 77.9 | 78.6 | 79.0 | 81.3 | 83.1 | 80.1 | 81.4 | 84.8 | 84.1 | 79.0 | 73.4 | 68.2 | 164.9 |
| 1600 | 74.1 | 77.4 | 79.7 | 79.2 | 80.1 | 81.4 | 79.8 | 80.2 | 82.9 | 82.8 | 76.9 | 71.6 | 65.9 | 165.1 |
| 2000 | 71.2 | 74.9 | 76.7 | 77.1 | 79.9 | 80.8 | 77.9 | 79.1 | 80.9 | 80.3 | 73.6 | 69.0 | 62.0 | 164.9 |
| 2500 | 67.3 | 72.4 | 75.0 | 75.6 | 78.3 | 78.8 | 75.6 | 76.3 | 79.2 | 75.5 | 68.1 | 62.4 | 55.1 | 164.8 |
| 3150 | 58.8 | 67.0 | 69.4 | 71.3 | 74.3 | 75.0 | 71.2 | 70.9 | 72.9 | 70.3 | 63.5 | 54.1 | 42.5 | 163.9 |
| 4000 | 50.9 | 57.6 | 62.6 | 64.0 | 65.5 | 66.9 | 65.2 | 63.8 | 66.1 | 61.1 | 53.7 | 41.5 | 25.1 | 163.1 |
| 5000 | 35.9 | 43.5 | 51.4 | 55.5 | 59.3 | 59.8 | 54.8 | 53.9 | 55.0 | 46.8 | 37.7 | 23.1 | | 162.7 |
| 6300 | 15.2 | 26.3 | 35.5 | 39.9 | 41.0 | 41.7 | 39.1 | 35.7 | 39.5 | 26.1 | 13.4 | | | 161.6 |
| 8000 | | 4.8 | 13.1 | 15.4 | 15.9 | 15.0 | 9.8 | 11.4 | | | | | | 159.9 |
| 10000 | | | | | | | | | | | | | | 158.3 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |
| OASPL | 85.9 | 87.3 | 88.8 | 88.8 | 90.9 | 92.0 | 91.0 | 92.9 | 99.1 | 99.8 | 97.1 | 91.0 | 84.3 | 177.2 |
| PWL | 93.3 | 96.0 | 98.1 | 98.3 | 100.6 | 101.6 | 99.6 | 100.9 | 105.3 | 105.2 | 101.1 | 94.1 | 87.8 | |
| PNLT | 93.3 | 96.0 | 99.0 | 98.9 | 101.9 | 102.8 | 99.6 | 100.9 | 106.0 | 105.2 | 101.1 | 94.1 | 87.8 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 29.84
LOCATION C41 ANECH CH AERO. RDG. ADH106 PAMB 29.5400 RELHUM 43.50

MODEL TEST POINT 7014 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 117.35 M/SEC (385.0 FPS)
FREE-JET SPEED

ORIGINAL PAGE IS
OF POOR QUALITY

08/30/79 19.452

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X70150
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ
50
63
80

100
125
160
200

250 85.8 90.3 89.3 90.1 90.0 93.1 95.2 97.1 101.6 106.9 111.0 114.5 113.9 147.6
315 86.6 89.7 89.7 90.0 92.3 94.2 94.8 96.7 103.9 108.5 112.6 115.8 114.0 148.8
400 88.4 90.7 91.2 90.7 91.8 94.2 95.8 98.0 105.2 112.3 115.2 117.1 114.0 150.8
500 89.0 91.3 92.5 92.6 93.9 95.8 96.7 98.6 106.3 113.4 116.7 117.9 115.1 151.7
630 89.8 93.1 93.4 93.4 95.5 96.9 98.0 100.7 108.2 113.2 117.1 118.0 115.9 152.1
800 94.4 93.4 94.7 95.5 95.8 97.9 99.1 102.5 109.7 113.8 117.1 119.1 116.7 152.8
1000 97.2 98.5 98.5 97.6 97.2 99.3 100.4 103.8 110.3 113.4 116.2 118.9 116.1 152.5
1250 94.8 98.4 98.7 98.7 98.7 98.7 98.7 98.7 98.7 98.7 98.7 98.7 98.7 153.1
1600 96.4 95.8 96.6 97.3 97.3 97.3 97.3 97.3 97.3 97.3 97.3 97.3 97.3 153.0
2000 96.6 99.2 98.4 97.7 97.8 99.9 101.8 105.0 112.1 114.0 117.2 116.7 112.2 152.2
2500 95.6 97.1 98.1 98.1 98.7 100.3 102.7 105.9 112.0 115.0 117.7 114.8 109.8 152.2
3150 96.1 98.7 97.4 97.9 98.0 101.4 103.0 105.2 112.1 114.1 116.0 113.9 108.1 151.3
4000 95.4 96.8 97.3 97.0 98.3 100.7 102.6 106.0 111.4 113.2 114.1 111.7 106.5 150.2
5000 95.0 97.4 97.4 97.6 98.7 101.0 102.7 106.4 110.8 113.3 113.2 110.3 104.8 149.9
6300 94.3 97.6 98.7 98.1 98.6 101.2 102.4 105.9 110.6 112.0 111.3 109.9 104.6 149.3
8000 93.1 96.8 97.9 98.5 99.1 101.0 102.0 104.8 109.0 110.7 110.0 107.6 103.7 148.4
10000 90.5 95.1 96.8 97.6 99.7 102.2 100.8 104.1 107.9 109.4 108.4 107.2 102.6 147.9
12500 88.1 94.2 95.1 96.2 98.5 100.2 99.9 102.7 105.1 107.4 106.1 104.9 100.9 146.7
16000 86.3 92.1 94.9 96.0 98.4 99.2 98.1 101.5 103.1 105.6 103.5 102.5 99.3 146.3
20000 81.3 89.9 90.9 93.5 97.1 97.9 95.6 97.6 100.0 102.0 100.7 99.9 97.2 145.2
25000 80.4 86.0 89.0 89.3 94.4 95.3 92.9 92.9 97.7 97.5 96.9 95.8 94.9 144.2
31500 78.4 82.2 86.5 88.6 88.9 89.9 89.1 89.8 93.5 96.5 94.1 90.6 88.0 144.0
40000 73.6 76.9 80.9 83.1 86.9 87.6 83.9 84.9 88.7 90.6 89.0 85.1 84.1 143.2
50000 66.5 70.5 73.5 76.2 79.9 80.2 79.1 78.3 83.8 85.0 83.1 80.4 78.8 141.6
63000 61.4 64.3 67.4 70.1 70.7 71.6 73.4 72.0 79.8 79.1 76.8 74.6 73.4 141.1
80000 55.6 58.2 61.9 65.1 64.3 66.5 66.8 66.5 73.8 73.1 73.1 69.0 66.0 142.3

8ASPL 106.5 108.9 109.4 109.6 110.9 112.7 113.6 116.7 122.3 125.3 127.8 128.6 125.5 163.9

TEST DATE 02-21-78 TAPE NO. N294 IALPHA SB59 TAMB 24.80
LOCATION C41 ANECH CH AERO. RDG. ADH093 PAMB 29.3550 RELHUM 39.00

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
7000 7015 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. M/SEC (0. FPS)

523

ORIGINAL PAGE 13
OF POOR QUALITY

08/30/79 19.452

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X70150

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 85.8 | 90.3 | 89.3 | 90.1 | 90.0 | 93.1 | 95.2 | 97.1 | 101.6 | 106.9 | 111.0 | 114.5 | 113.9 | 147.6 |
| 315 | 86.6 | 89.7 | 89.7 | 90.0 | 92.3 | 94.2 | 94.8 | 96.7 | 103.9 | 108.5 | 112.6 | 115.8 | 114.0 | 148.8 |
| 400 | 88.4 | 90.7 | 91.2 | 90.7 | 91.8 | 94.2 | 95.8 | 98.0 | 105.2 | 112.3 | 115.2 | 117.1 | 114.0 | 150.6 |
| 500 | 89.0 | 91.3 | 92.5 | 92.6 | 93.9 | 95.8 | 96.7 | 98.6 | 106.3 | 113.4 | 116.7 | 117.9 | 115.1 | 151.7 |
| 630 | 89.8 | 93.1 | 93.4 | 93.4 | 98.5 | 96.9 | 98.0 | 100.7 | 109.2 | 113.2 | 117.1 | 118.0 | 115.9 | 152.1 |
| 800 | 94.4 | 93.4 | 94.7 | 95.5 | 95.8 | 97.9 | 99.1 | 102.5 | 109.7 | 113.8 | 117.1 | 119.1 | 116.7 | 152.8 |
| 1000 | 97.2 | 98.5 | 98.5 | 97.6 | 97.2 | 99.3 | 100.4 | 103.8 | 110.3 | 113.4 | 116.2 | 118.9 | 116.1 | 152.5 |
| 1250 | 94.8 | 98.4 | 98.7 | 98.7 | 99.8 | 101.4 | 101.4 | 104.7 | 110.8 | 113.7 | 116.4 | 119.5 | 115.7 | 153.1 |
| 1600 | 96.4 | 95.8 | 96.6 | 97.3 | 98.7 | 101.0 | 102.2 | 105.3 | 111.5 | 113.4 | 117.9 | 118.8 | 115.1 | 153.0 |
| 2000 | 96.6 | 99.2 | 98.4 | 97.7 | 97.8 | 99.9 | 101.8 | 105.0 | 112.1 | 114.0 | 117.2 | 116.7 | 112.2 | 152.2 |
| 2500 | 95.6 | 97.1 | 98.1 | 98.1 | 98.7 | 100.3 | 102.7 | 105.9 | 112.0 | 115.0 | 117.7 | 114.8 | 109.8 | 152.2 |
| 3150 | 96.1 | 98.7 | 97.4 | 97.9 | 99.0 | 101.4 | 103.0 | 106.2 | 112.1 | 114.1 | 116.0 | 113.9 | 108.1 | 151.3 |
| 4000 | 95.4 | 96.8 | 97.3 | 97.0 | 98.3 | 100.7 | 102.6 | 106.0 | 111.4 | 113.2 | 114.1 | 111.7 | 106.5 | 150.2 |
| 5000 | 95.0 | 97.4 | 97.6 | 97.6 | 98.7 | 101.0 | 102.7 | 106.4 | 110.8 | 113.3 | 113.2 | 110.3 | 104.8 | 149.9 |
| 6300 | 94.3 | 97.6 | 98.7 | 98.1 | 98.6 | 101.2 | 102.4 | 105.9 | 110.6 | 112.0 | 111.3 | 109.9 | 104.6 | 149.3 |
| 8000 | 93.1 | 96.8 | 97.9 | 98.5 | 99.1 | 101.0 | 102.0 | 104.9 | 109.0 | 110.7 | 110.0 | 107.6 | 103.7 | 148.4 |
| 10000 | 90.5 | 95.1 | 96.8 | 97.6 | 99.7 | 102.2 | 100.8 | 104.1 | 107.9 | 109.4 | 108.4 | 107.2 | 102.6 | 147.9 |
| 12500 | 88.1 | 94.2 | 95.1 | 96.2 | 98.5 | 100.2 | 99.9 | 102.7 | 105.1 | 107.4 | 106.1 | 104.9 | 100.9 | 146.7 |
| 16000 | 86.3 | 92.1 | 94.9 | 96.0 | 98.4 | 99.2 | 98.1 | 101.5 | 103.1 | 105.6 | 103.5 | 102.5 | 99.3 | 146.3 |
| 20000 | 81.3 | 89.9 | 90.9 | 93.5 | 97.1 | 97.9 | 95.6 | 97.6 | 100.0 | 102.0 | 100.7 | 99.9 | 97.2 | 145.2 |
| 25000 | 80.4 | 86.0 | 89.0 | 89.3 | 94.4 | 95.3 | 92.9 | 92.9 | 97.7 | 97.5 | 96.3 | 95.8 | 94.9 | 144.2 |
| 31500 | 78.4 | 82.2 | 86.5 | 88.6 | 88.9 | 89.9 | 89.1 | 89.8 | 93.5 | 96.5 | 94.1 | 90.6 | 88.0 | 144.0 |
| 40000 | 73.6 | 76.9 | 80.9 | 83.1 | 86.9 | 87.6 | 83.9 | 84.9 | 88.7 | 90.6 | 89.0 | 85.1 | 84.1 | 143.2 |
| 50000 | 66.5 | 70.5 | 73.5 | 76.2 | 78.9 | 80.2 | 79.1 | 78.3 | 83.8 | 85.0 | 83.1 | 80.4 | 78.8 | 141.6 |
| 63000 | 61.4 | 64.3 | 67.4 | 70.1 | 70.7 | 71.6 | 73.4 | 72.0 | 79.8 | 79.1 | 76.8 | 74.6 | 73.4 | 141.1 |
| 80000 | 55.6 | 58.2 | 61.9 | 65.1 | 64.3 | 66.5 | 66.8 | 66.5 | 73.8 | 73.1 | 73.1 | 69.0 | 66.0 | 142.3 |

GASPL 106.5 108.9 109.4 109.6 110.9 112.7 113.6 116.7 122.3 125.3 127.8 128.6 125.5 163.9

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000
 FREE JET VELOCITY (FT/SEC) 0.
 FREE JET DIAMETER (IN) 48.00
 REFRACTION CORRECTION - YES
 TURBULANCE CORRECTION - YES

TEST DATE 02-21-78 TAPE NO. N294 ALPHA SB59 TAMB 24.80
 LOCATION C41 ANECH CH AERO. RDG. ADH093 PAMB 29.3550 RELHUM 39.00

MODEL TEST POINT 7015 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED 0. M/SEC (0. FPS)

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OF POOR QUALITY

08/30/79 19.452

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X70151

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 66.6 | 70.4 | 72.0 | 72.3 | 73.6 | 76.3 | 77.8 | 79.5 | 86.0 | 92.0 | 93.4 | 93.1 | 86.7 | 168.2 |
| 63 | 67.2 | 71.0 | 73.3 | 74.1 | 75.9 | 77.9 | 78.6 | 80.1 | 87.1 | 93.1 | 94.9 | 93.9 | 87.7 | 169.4 |
| 80 | 68.0 | 72.8 | 74.2 | 74.9 | 76.4 | 78.9 | 79.9 | 82.2 | 88.9 | 92.9 | 95.2 | 93.9 | 88.5 | 169.8 |
| 100 | 72.4 | 73.0 | 75.4 | 76.9 | 77.7 | 79.9 | 80.9 | 83.9 | 90.4 | 93.4 | 95.2 | 94.9 | 89.1 | 170.4 |
| 125 | 75.2 | 76.0 | 79.2 | 78.9 | 78.9 | 81.2 | 82.2 | 85.2 | 90.9 | 92.9 | 94.2 | 94.6 | 88.2 | 170.2 |
| 160 | 72.6 | 77.6 | 79.2 | 79.9 | 81.4 | 83.2 | 83.2 | 83.9 | 91.3 | 93.1 | 95.1 | 94.9 | 87.5 | 170.8 |
| 200 | 73.9 | 75.0 | 76.9 | 78.4 | 80.2 | 82.7 | 83.7 | 86.4 | 91.8 | 92.6 | 95.4 | 93.9 | 88.4 | 170.7 |
| 250 | 73.8 | 76.1 | 78.5 | 78.6 | 79.1 | 81.3 | 83.1 | 85.8 | 92.2 | 92.9 | 94.4 | 91.3 | 82.8 | 169.9 |
| 315 | 72.3 | 75.7 | 77.9 | 78.7 | 79.7 | 81.5 | 83.7 | 86.5 | 91.8 | 93.5 | 94.4 | 89.0 | 75.7 | 169.9 |
| 400 | 72.4 | 76.8 | 76.8 | 78.2 | 79.7 | 82.2 | 83.7 | 86.4 | 91.5 | 92.2 | 92.2 | 87.3 | 77.0 | 169.0 |
| 500 | 71.2 | 74.5 | 76.4 | 77.0 | 78.8 | 81.3 | 83.0 | 86.0 | 90.5 | 90.9 | 89.8 | 84.5 | 74.3 | 167.8 |
| 630 | 70.3 | 74.7 | 76.2 | 77.3 | 78.9 | 81.4 | 82.9 | 86.0 | 89.6 | 90.7 | 88.5 | 82.5 | 71.6 | 167.5 |
| 800 | 69.1 | 74.6 | 77.1 | 77.5 | 78.6 | 81.4 | 82.4 | 85.3 | 89.0 | 89.0 | 86.1 | 81.3 | 70.2 | 166.9 |
| 1000 | 67.5 | 73.5 | 76.1 | 77.7 | 78.9 | 80.9 | 81.6 | 84.1 | 87.3 | 87.4 | 84.3 | 78.4 | 68.2 | 166.0 |
| 1250 | 64.4 | 71.5 | 74.8 | 76.7 | 79.4 | 82.0 | 80.5 | 83.2 | 85.9 | 85.8 | 82.2 | 77.1 | 65.6 | 165.6 |
| 1600 | 61.1 | 69.9 | 72.7 | 74.9 | 77.9 | 79.7 | 79.2 | 81.4 | 82.7 | 83.1 | 79.1 | 73.5 | 61.6 | 164.3 |
| 2000 | 58.3 | 67.2 | 72.1 | 74.5 | 77.6 | 78.6 | 77.3 | 80.0 | 80.3 | 80.8 | 75.5 | 69.5 | 57.0 | 164.0 |
| 2500 | 51.5 | 63.8 | 67.2 | 71.4 | 75.7 | 76.8 | 74.2 | 75.5 | 76.3 | 75.9 | 70.9 | 64.1 | 50.0 | 162.9 |
| 3150 | 47.2 | 57.4 | 63.4 | 65.6 | 71.7 | 72.9 | 70.2 | 69.1 | 72.2 | 69.0 | 63.7 | 55.0 | 39.3 | 161.9 |
| 4000 | 39.0 | 49.0 | 57.1 | 61.6 | 63.2 | 64.6 | 63.4 | 62.8 | 64.1 | 63.3 | 54.7 | 40.9 | 17.9 | 161.6 |
| 5000 | 24.5 | 36.1 | 45.3 | 50.7 | 56.2 | 57.5 | 53.2 | 52.5 | 53.0 | 49.8 | 39.9 | 21.7 | | 160.9 |
| 6300 | | 15.5 | 25.8 | 33.0 | 38.1 | 40.2 | 38.3 | 35.1 | 36.1 | 30.0 | 16.2 | | | 159.3 |
| 8000 | | | | | 7.6 | 11.6 | 13.8 | 14.5 | 9.5 | 10.6 | | | | 158.6 |
| 10000 | | | | | | | | | | | | | | 160.0 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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QASPL 83.2 67.1 66.7 69.7 91.4 93.4 94.2 96.9 101.9 103.6 104.9 103.4 96.6 181.3
PNL 67.1 92.3 95.1 97.0 99.6 101.3 100.9 103.3 107.2 108.3 108.3 108.0 104.8 96.4
PNLT 87.1 92.3 95.1 97.0 100.8 102.4 100.9 103.3 107.2 108.3 108.3 108.0 104.8 97.6

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-21-78 TAPE NO. N294 ALPHA S859 TAMB 24.80
LOCATION C41 ANECH CH AERO. ROG. ADH093 PAMB 29.3550 RELHUM 39.00

MODEL TEST POINT 7015 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 0. FREE-JET SPEED
7015 0. M/SEC (0. FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X70160
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 81.5 | 85.3 | 84.6 | 86.1 | 86.9 | 89.6 | 90.9 | 93.1 | 96.6 | 103.4 | 106.0 | 111.2 | 110.6 | 144.4 |
| 315 | 83.9 | 84.9 | 86.4 | 86.5 | 87.6 | 90.7 | 91.3 | 94.0 | 100.2 | 105.7 | 109.6 | 112.6 | 110.2 | 145.6 |
| 400 | 85.6 | 86.4 | 87.3 | 86.7 | 88.6 | 91.2 | 91.8 | 94.2 | 101.7 | 109.0 | 112.7 | 114.1 | 109.5 | 147.5 |
| 500 | 86.2 | 86.8 | 88.5 | 88.3 | 90.2 | 92.3 | 93.2 | 95.6 | 102.8 | 110.9 | 114.5 | 113.9 | 107.3 | 148.4 |
| 630 | 86.3 | 87.6 | 89.1 | 89.2 | 95.3 | 93.6 | 94.0 | 97.9 | 105.1 | 111.2 | 114.8 | 113.5 | 104.9 | 148.6 |
| 800 | 89.9 | 87.9 | 90.2 | 90.7 | 91.8 | 94.7 | 95.3 | 99.5 | 107.2 | 111.7 | 114.6 | 112.3 | 102.0 | 148.6 |
| 1000 | 90.5 | 89.5 | 92.0 | 91.3 | 92.9 | 95.6 | 96.9 | 100.3 | 108.5 | 111.3 | 114.0 | 110.4 | 99.6 | 148.1 |
| 1250 | 89.6 | 90.9 | 92.9 | 92.9 | 94.3 | 96.9 | 98.0 | 101.7 | 108.3 | 111.0 | 114.3 | 109.8 | 97.9 | 148.1 |
| 1600 | 91.4 | 90.0 | 92.0 | 92.6 | 93.9 | 96.0 | 98.1 | 103.1 | 109.4 | 112.1 | 114.3 | 108.3 | 97.8 | 148.6 |
| 2000 | 90.6 | 90.9 | 92.4 | 92.7 | 93.7 | 97.1 | 98.7 | 103.4 | 110.3 | 112.7 | 114.2 | 107.1 | 97.9 | 148.6 |
| 2500 | 90.5 | 91.1 | 93.1 | 93.3 | 94.9 | 97.5 | 98.9 | 103.6 | 110.0 | 113.2 | 114.4 | 107.6 | 98.1 | 149.1 |
| 3150 | 91.6 | 92.1 | 92.7 | 93.7 | 95.0 | 98.3 | 100.2 | 104.7 | 111.1 | 112.8 | 114.0 | 107.4 | 97.9 | 149.1 |
| 4000 | 92.7 | 91.8 | 93.1 | 93.3 | 94.6 | 98.0 | 99.6 | 104.6 | 110.2 | 112.5 | 112.3 | 105.5 | 96.7 | 148.3 |
| 5000 | 95.6 | 94.2 | 94.5 | 94.0 | 95.3 | 98.6 | 99.8 | 105.0 | 110.2 | 112.7 | 111.3 | 104.2 | 95.9 | 148.3 |
| 6300 | 95.4 | 96.3 | 97.1 | 95.3 | 95.6 | 99.2 | 100.1 | 103.8 | 109.5 | 111.3 | 110.0 | 103.0 | 96.0 | 147.6 |
| 8000 | 93.9 | 94.8 | 96.2 | 96.5 | 96.8 | 99.0 | 99.5 | 103.6 | 108.6 | 109.8 | 108.5 | 102.1 | 94.7 | 146.9 |
| 10000 | 92.6 | 93.7 | 94.6 | 95.2 | 97.3 | 99.7 | 99.4 | 102.9 | 107.3 | 109.1 | 106.9 | 101.2 | 94.1 | 146.5 |
| 12500 | 92.2 | 93.6 | 93.5 | 93.8 | 95.6 | 98.5 | 98.2 | 101.1 | 104.5 | 107.1 | 104.5 | 99.7 | 92.7 | 145.3 |
| 16000 | 89.4 | 93.0 | 94.1 | 94.6 | 95.6 | 97.8 | 96.5 | 99.6 | 103.1 | 105.1 | 102.2 | 98.4 | 91.6 | 145.1 |
| 20000 | 84.7 | 89.9 | 90.9 | 92.5 | 95.0 | 96.8 | 94.5 | 97.3 | 100.4 | 102.3 | 99.1 | 95.3 | 90.1 | 144.5 |
| 25000 | 83.3 | 86.2 | 88.2 | 88.8 | 93.4 | 94.2 | 92.0 | 92.6 | 97.7 | 97.6 | 95.1 | 91.7 | 88.1 | 143.4 |
| 31500 | 82.1 | 82.5 | 86.2 | 87.8 | 87.6 | 88.6 | 88.5 | 89.6 | 93.5 | 95.1 | 92.6 | 87.1 | 82.4 | 143.0 |
| 40000 | 77.3 | 77.2 | 80.8 | 82.3 | 85.6 | 86.6 | 83.1 | 84.4 | 88.9 | 89.6 | 87.5 | 81.3 | 78.0 | 142.3 |
| 50000 | 68.9 | 71.0 | 73.0 | 75.9 | 78.1 | 79.1 | 78.5 | 77.8 | 84.0 | 82.1 | 80.8 | 75.8 | 71.7 | 140.3 |
| 63000 | 64.6 | 64.3 | 66.4 | 69.5 | 69.4 | 71.3 | 72.3 | 70.7 | 79.6 | 75.6 | 74.5 | 70.2 | 65.8 | 139.6 |
| 80000 | 57.8 | 57.7 | 60.7 | 64.1 | 62.5 | 65.2 | 64.5 | 65.2 | 72.8 | 69.7 | 69.3 | 60.7 | 57.6 | 140.0 |
| QASPL | 104.2 | 104.7 | 105.9 | 106.0 | 107.6 | 110.2 | 110.9 | 114.8 | 120.8 | 123.7 | 125.3 | 122.5 | 116.8 | 160.9 |

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| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | SB59 | TAMB | 28.58 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH104 | PAMB | 29.5400 | RELHUM | 43.20 |

| MODEL | TEST POINT | ACOUSTIC RANGE | ARC | 154.7 SQ CM (| 23.99 SQ IN) | MODEL | FREE-JET SPEED |
|-------|------------|----------------|----------|---------------|--------------|-------|--------------------------|
| 7000 | 7016 | 12.2 M (| 40.0 FT) | | | | 89.61 M/SEC (294.0 FPS) |

07/17/78 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X70160

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 87.1 | 89.8 | 88.3 | 88.4 | 88.1 | 89.6 | 89.5 | 90.4 | 97.5 | 102.4 | 105.9 | 109.1 | 108.1 | 142.4 |
| 315 | 87.1 | 89.8 | 88.3 | 88.9 | 89.1 | 90.8 | 90.3 | 91.9 | 100.2 | 107.0 | 110.4 | 112.5 | 109.7 | 145.8 |
| 400 | 88.4 | 89.5 | 90.0 | 89.1 | 89.9 | 91.3 | 91.2 | 92.8 | 101.2 | 108.9 | 112.6 | 113.2 | 109.2 | 147.1 |
| 500 | 90.9 | 90.9 | 90.8 | 90.8 | 91.5 | 92.5 | 92.4 | 94.0 | 103.6 | 109.4 | 113.2 | 113.4 | 109.3 | 147.6 |
| 630 | 91.7 | 91.4 | 92.1 | 92.5 | 97.0 | 93.9 | 93.2 | 96.2 | 105.8 | 110.1 | 113.3 | 113.0 | 107.3 | 147.8 |
| 800 | 93.8 | 93.8 | 94.0 | 93.3 | 93.2 | 94.9 | 94.5 | 97.7 | 107.3 | 109.9 | 113.0 | 111.9 | 106.6 | 147.6 |
| 1000 | 95.4 | 92.5 | 93.8 | 93.9 | 94.4 | 95.9 | 96.2 | 98.6 | 107.1 | 109.5 | 113.3 | 111.1 | 104.8 | 147.4 |
| 1250 | 95.9 | 94.1 | 95.7 | 95.6 | 95.8 | 97.3 | 97.3 | 100.0 | 108.3 | 110.6 | 113.1 | 109.4 | 104.2 | 147.6 |
| 1600 | 95.1 | 95.5 | 96.6 | 95.3 | 95.8 | 98.6 | 98.6 | 101.5 | 109.3 | 111.4 | 113.1 | 108.2 | 104.1 | 148.0 |
| 2000 | 96.9 | 94.7 | 95.8 | 95.5 | 95.5 | 97.8 | 98.3 | 101.9 | 109.2 | 112.1 | 113.5 | 108.9 | 104.5 | 148.4 |
| 2500 | 96.1 | 95.6 | 96.2 | 96.3 | 96.8 | 98.4 | 99.7 | 102.3 | 110.6 | 112.0 | 113.4 | 109.0 | 104.7 | 148.7 |
| 3150 | 98.0 | 95.8 | 96.9 | 96.7 | 97.1 | 99.4 | 100.2 | 103.6 | 110.1 | 112.0 | 112.2 | 107.6 | 104.0 | 148.3 |
| 4000 | 97.0 | 96.8 | 96.5 | 96.5 | 96.9 | 99.4 | 99.9 | 103.8 | 110.5 | 112.7 | 111.6 | 106.8 | 103.7 | 148.5 |
| 5000 | 98.1 | 96.5 | 97.0 | 97.2 | 97.8 | 100.4 | 100.5 | 104.7 | 110.4 | 111.9 | 111.0 | 106.3 | 104.4 | 148.4 |
| 6300 | 100.2 | 98.4 | 98.2 | 98.8 | 98.4 | 101.4 | 101.3 | 104.0 | 110.1 | 110.9 | 109.8 | 105.7 | 103.3 | 148.1 |
| 8000 | 99.9 | 100.5 | 100.8 | 100.6 | 100.2 | 101.7 | 101.3 | 104.4 | 109.0 | 110.4 | 108.5 | 104.9 | 102.9 | 148.1 |
| 10000 | 98.8 | 99.4 | 100.3 | 99.4 | 100.9 | 102.7 | 101.2 | 103.7 | 106.5 | 108.7 | 106.2 | 103.7 | 101.7 | 147.2 |
| 12500 | 97.2 | 98.1 | 98.5 | 98.0 | 99.2 | 101.5 | 100.1 | 101.8 | 105.6 | 107.3 | 104.5 | 102.9 | 101.2 | 146.7 |
| 16000 | 96.3 | 97.4 | 96.9 | 98.8 | 99.2 | 100.8 | 98.4 | 100.4 | 103.7 | 105.2 | 102.4 | 101.0 | 101.4 | 146.7 |
| 20000 | 93.2 | 96.4 | 97.1 | 97.5 | 100.0 | 99.8 | 98.7 | 98.5 | 102.2 | 101.8 | 99.8 | 99.0 | 100.8 | 146.8 |
| 25000 | 89.8 | 94.3 | 94.5 | 93.8 | 97.4 | 97.2 | 94.5 | 94.1 | 97.9 | 99.1 | 96.8 | 93.4 | 93.8 | 145.8 |
| 31500 | 87.6 | 89.8 | 91.0 | 92.0 | 91.2 | 91.6 | 90.5 | 90.4 | 94.6 | 94.9 | 93.1 | 89.4 | 91.7 | 145.0 |
| 40000 | 83.6 | 83.7 | 86.9 | 87.3 | 89.6 | 89.5 | 83.4 | 85.7 | 90.2 | 87.9 | 86.9 | 84.3 | 85.9 | 144.5 |
| 50000 | 80.4 | 79.6 | 82.2 | 80.9 | 82.1 | 82.1 | 80.9 | 79.1 | 86.3 | 81.9 | 81.1 | 79.0 | 79.8 | 143.3 |
| 63000 | 72.0 | 72.5 | 73.6 | 73.7 | 73.0 | 74.3 | 74.5 | 71.8 | 81.0 | 77.4 | 77.2 | 70.8 | 72.8 | 142.1 |
| 80000 | 63.3 | 62.7 | 64.4 | 69.1 | 66.5 | 68.2 | 66.5 | 66.2 | 71.2 | 67.6 | 67.4 | 61.0 | 63.0 | 140.7 |
| QASPL | 108.2 | 109.2 | 109.6 | 109.6 | 110.4 | 112.0 | 111.5 | 114.3 | 120.7 | 123.0 | 124.3 | 122.5 | 118.6 | 161.1 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 294.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 46.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | SB59 | TAMB | 28.58 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH.CH | AERO. RDG. | ADH104 | PAMB | 29.5400 | RELHUM | 43.20 |

| MODEL | TEST POINT | ACOUSTIC RANGE | 12.2 M (40.0 FT) ARC | 184.7 SQ CM (23.99 SQ IN) - MODEL | FREE-JET SPEED |
|-------|------------|----------------|-----------------------|------------------------------------|----------------|
| 7000 | 7016 | | | 89.61 M/SEC (294.0 FPS) | |

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X70161

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 67.6 | 69.2 | 70.8 | 70.7 | 71.8 | 73.4 | 73.1 | 74.4 | 82.0 | 88.7 | 90.8 | 89.2 | 81.9 | 164.8 |
| 63 | 69.1 | 70.6 | 71.6 | 72.3 | 73.4 | 74.6 | 74.3 | 76.6 | 84.4 | 89.1 | 91.4 | 89.4 | 80.9 | 165.2 |
| 80 | 69.9 | 71.1 | 72.8 | 74.0 | 78.9 | 75.9 | 75.1 | 77.7 | 86.5 | 89.8 | 91.4 | 88.9 | 79.8 | 165.5 |
| 100 | 71.9 | 73.5 | 74.7 | 74.7 | 75.1 | 76.9 | 76.4 | 79.2 | 88.0 | 89.5 | 91.0 | 87.7 | 78.9 | 165.2 |
| 125 | 73.3 | 72.1 | 74.4 | 75.2 | 76.1 | 77.8 | 77.9 | 79.9 | 87.7 | 89.0 | 91.2 | 86.8 | 76.9 | 165.1 |
| 160 | 73.6 | 73.5 | 76.1 | 76.8 | 77.5 | 79.1 | 79.0 | 81.2 | 88.6 | 90.0 | 90.9 | 84.8 | 76.0 | 165.3 |
| 200 | 72.6 | 74.7 | 76.9 | 76.4 | 77.0 | 80.2 | 80.1 | 82.5 | 89.6 | 90.5 | 90.6 | 83.3 | 75.4 | 165.6 |
| 250 | 74.1 | 73.6 | 75.8 | 76.3 | 76.8 | 79.2 | 79.6 | 82.8 | 89.3 | 90.9 | 90.7 | 83.6 | 75.2 | 166.0 |
| 315 | 72.8 | 74.1 | 75.9 | 76.8 | 77.9 | 79.6 | 80.7 | 82.9 | 90.3 | 90.5 | 90.1 | 83.1 | 74.5 | 166.3 |
| 400 | 72.2 | 73.9 | 76.3 | 77.0 | 77.8 | 80.3 | 81.0 | 83.9 | 89.5 | 90.2 | 88.4 | 81.0 | 72.8 | 166.0 |
| 500 | 72.8 | 74.6 | 75.6 | 76.5 | 77.4 | 80.0 | 80.4 | 83.8 | 89.6 | 90.5 | 87.4 | 79.6 | 71.5 | 166.2 |
| 630 | 73.4 | 73.9 | 75.8 | 76.9 | 78.0 | 80.7 | 80.6 | 84.3 | 89.2 | 89.3 | 86.3 | 78.5 | 71.2 | 166.1 |
| 800 | 74.9 | 75.4 | 76.6 | 78.2 | 78.4 | 81.5 | 81.2 | 83.4 | 88.6 | 87.9 | 84.6 | 77.1 | 69.9 | 165.8 |
| 1000 | 74.3 | 77.2 | 79.1 | 79.8 | 80.0 | 81.7 | 81.1 | 83.6 | 87.2 | 87.1 | 82.8 | 75.7 | 67.4 | 165.7 |
| 1250 | 72.7 | 76.7 | 78.3 | 78.5 | 80.6 | 82.6 | 80.9 | 82.7 | 84.5 | 85.0 | 80.1 | 73.6 | 64.8 | 164.9 |
| 1600 | 70.2 | 73.8 | 76.1 | 76.7 | 78.6 | 81.1 | 79.4 | 80.6 | 83.2 | 83.0 | 77.5 | 71.5 | 61.9 | 164.4 |
| 2000 | 68.3 | 72.6 | 74.1 | 77.3 | 78.4 | 80.2 | 77.6 | 78.9 | 80.9 | 80.4 | 74.4 | 68.0 | 59.1 | 164.3 |
| 2500 | 63.4 | 70.4 | 73.4 | 75.3 | 78.6 | 78.7 | 75.4 | 76.3 | 78.5 | 75.7 | 70.0 | 63.1 | 53.6 | 164.5 |
| 3150 | 56.7 | 65.8 | 68.9 | 70.0 | 74.6 | 74.8 | 71.8 | 70.4 | 72.3 | 70.6 | 63.6 | 52.6 | 38.2 | 163.5 |
| 4000 | 48.2 | 56.6 | 61.6 | 65.0 | 65.5 | 66.3 | 64.8 | 63.4 | 65.2 | 61.7 | 53.8 | 39.6 | 21.6 | 162.6 |
| 5000 | 34.4 | 42.9 | 51.3 | 54.9 | 58.9 | 59.4 | 54.7 | 53.2 | 54.6 | 47.1 | 37.8 | 20.9 | | 162.2 |
| 6300 | 13.5 | 24.6 | 34.5 | 37.7 | 41.3 | 42.1 | 40.1 | 35.9 | 38.6 | 26.9 | 14.1 | | | 161.0 |
| 8000 | | | 4.6 | 11.3 | 14.1 | 16.5 | 15.5 | 9.3 | 11.9 | | | | | 159.8 |
| 10000 | | | | | | | | | | | | | | 158.4 |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| CASPL | 84.8 | 86.3 | 88.3 | 89.2 | 90.5 | 92.3 | 91.6 | 94.2 | 100.1 | 101.3 | 101.3 | 96.9 | 88.5 | 178.5 |
| PNL | 91.0 | 94.3 | 96.9 | 98.3 | 100.6 | 101.7 | 99.9 | 101.6 | 105.9 | 106.4 | 104.6 | 98.1 | 89.1 | |
| PNLT | 91.0 | 94.3 | 97.6 | 98.8 | 101.6 | 102.8 | 100.6 | 102.1 | 106.5 | 106.4 | 104.6 | 98.1 | 90.3 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 IALPHA SB59 TAMB 29.59
 LOCATION C41 ANECH CH AERO. RDG. ADH104 PAMB 29.5400 RELHUM 43.20

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
 7000 7016 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 89.61 M/SEC (294.0 FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X70170
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ
50
63
80

100
125
160
200

250 61.5 64.0 64.0 65.9 66.3 67.9 69.6 92.5 97.5 102.1 107.3 110.7 109.6 143.6
315 63.0 64.0 65.6 65.3 66.7 69.1 69.9 91.0 93.4 100.7 108.5 111.9 112.1 106.8 146.2
400 65.1 66.4 65.9 67.5 69.5 69.9 91.0 93.4 100.7 108.5 111.9 112.1 106.8 146.2
500 65.2 66.4 67.5 69.1 69.7 92.4 94.5 101.8 110.1 113.5 112.2 103.6 147.2
630 65.3 66.6 68.1 68.1 69.5 92.3 93.5 96.9 104.9 110.7 113.6 110.5 100.4 147.4
800 66.1 66.6 69.1 69.7 90.5 93.6 94.8 98.2 106.4 111.0 113.6 108.5 98.0 147.2
1000 69.2 68.2 90.7 90.3 91.9 94.7 95.9 99.5 107.3 111.6 112.5 103.6 96.3 146.9
1250 68.3 90.3 92.1 91.9 93.2 96.1 96.7 100.7 107.8 111.0 112.8 104.5 95.4 146.9
1600 90.4 68.7 91.0 91.5 93.1 96.3 98.1 102.3 108.9 111.1 112.3 103.0 95.3 147.1
2000 89.1 69.4 91.6 91.6 92.7 95.6 97.5 102.2 109.8 112.0 111.7 102.9 95.1 147.3
2500 89.5 90.3 92.1 92.3 93.9 96.3 98.4 103.1 109.2 112.9 111.9 104.3 95.8 147.8
3150 91.1 90.9 91.9 92.9 94.2 96.8 99.5 103.7 110.3 111.3 112.0 104.1 95.9 147.6
4000 92.0 91.3 92.3 92.8 94.1 97.0 99.1 103.8 109.2 111.7 110.3 103.5 95.7 147.2
5000 95.4 94.5 94.0 94.0 94.8 97.6 99.0 103.7 109.7 111.7 110.3 103.2 94.9 147.5
6300 94.5 96.4 96.4 95.6 95.6 96.4 100.1 103.6 109.0 110.8 108.5 102.6 94.7 147.0
8000 92.9 94.3 95.5 96.8 96.8 97.7 99.3 102.9 108.6 109.8 107.5 105.4 94.2 146.6
10000 92.1 93.0 94.4 95.5 97.3 99.2 99.1 102.7 107.1 108.9 105.7 100.3 93.4 146.1
12500 91.4 93.4 93.8 94.1 95.9 98.0 97.7 100.9 104.8 106.4 103.5 98.5 92.7 144.9
16000 90.0 92.6 94.1 94.7 96.4 97.3 97.0 103.1 104.9 101.2 97.0 91.7 145.0
20000 85.3 89.9 90.7 93.5 96.0 96.9 94.0 96.9 100.2 101.3 97.7 94.1 90.1 144.0
25000 84.1 85.7 88.5 89.1 93.4 94.8 91.9 92.4 97.5 96.9 93.4 90.6 88.4 143.1
31500 82.6 82.5 86.3 87.9 87.9 89.2 88.6 89.4 93.6 94.4 91.2 86.1 82.9 142.7
40000 77.4 77.5 80.7 82.6 85.9 87.1 83.2 84.4 88.5 87.9 85.8 80.9 78.6 141.9
50000 70.5 70.8 73.1 75.7 77.9 79.7 78.1 77.8 83.9 81.4 79.9 75.3 72.5 140.1
63000 64.4 64.1 67.3 69.6 70.2 71.6 72.6 71.0 79.4 74.7 72.9 69.6 66.1 139.4
80000 58.1 67.0 60.7 64.4 62.3 65.5 64.5 61.9 68.0 67.1 60.3 58.0 139.2

QASPL 103.5 104.1 105.3 105.8 107.4 109.3 110.2 114.1 120.2 123.1 123.8 120.2 114.7 160.0

TEST DATE 02-27-78
LOCATION C41 ANECH CH

TAPE NO. N299
AERO. RDG. ADH103

IALPHA SB59
PAMB 29.5400

TAMB 29.48
RELHUM 42.70

MODEL TEST POINT
7000 7017

ACQUSTIC RANGE
12.2 M (40.0 FT) ARC

SIZE
154.7 SQ CM (23.99 SQ IN) - MODEL

FREE-JET SPEED
117.65 M/SEC (386.0 FPS)

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07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X70170

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

CASPL

110.4

110.2

110.4

109.8

110.9

111.6

111.1

113.5

120.3

122.4

122.8

120.1

118.3

160.5

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MODEL/FULL SIZE SCALE FACTOR
INPUT 1.000 CALC. 1.000

FREE JET VELOCITY (FT/SEC) 386.00
FREE JET DIAMETER (IN) 48.00

REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 YAMB 29.48
LOCATION C41 ANECH CH AERO. RDG. ADH103 PAMB 29.5400 RELHUM 42.70

MODEL TEST POINT 7017 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.65 M/SEC (386.0 FPS) FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X70171

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 68.4 | 69.8 | 71.0 | 70.1 | 71.1 | 72.2 | 72.2 | 73.3 | 80.4 | 87.3 | 89.2 | 87.2 | 78.9 | 163.0 |
| 63 | 69.6 | 70.3 | 71.5 | 70.4 | 72.9 | 73.1 | 73.3 | 73.9 | 83.6 | 87.9 | 89.7 | 86.2 | 77.5 | 163.2 |
| 80 | 70.7 | 71.3 | 73.0 | 72.3 | 79.8 | 74.7 | 74.4 | 76.1 | 85.4 | 88.5 | 89.9 | 86.3 | 77.4 | 163.6 |
| 100 | 73.4 | 74.5 | 75.3 | 74.0 | 74.3 | 76.1 | 75.7 | 77.4 | 86.5 | 89.4 | 89.2 | 83.4 | 77.8 | 163.6 |
| 125 | 73.4 | 72.3 | 74.6 | 74.5 | 75.7 | 77.2 | 76.8 | 78.8 | 87.0 | 88.7 | 89.5 | 82.0 | 76.5 | 163.5 |
| 160 | 74.3 | 73.8 | 76.1 | 75.0 | 77.1 | 78.6 | 77.7 | 79.9 | 88.2 | 88.9 | 88.8 | 80.2 | 75.6 | 163.7 |
| 200 | 73.2 | 76.7 | 77.4 | 76.6 | 77.0 | 78.9 | 78.1 | 81.5 | 89.2 | 89.8 | 88.2 | 80.0 | 75.2 | 164.4 |
| 250 | 74.9 | 73.9 | 76.1 | 76.1 | 76.6 | 78.2 | 78.5 | 81.4 | 88.7 | 90.9 | 88.5 | 81.4 | 75.7 | 165.1 |
| 315 | 73.2 | 74.2 | 76.5 | 76.1 | 77.7 | 79.0 | 79.5 | 82.4 | 90.0 | 89.5 | 88.8 | 81.4 | 75.9 | 165.5 |
| 400 | 73.1 | 74.8 | 76.7 | 76.6 | 78.0 | 79.6 | 80.7 | 83.1 | 89.2 | 90.1 | 87.3 | 80.6 | 75.1 | 165.6 |
| 500 | 74.2 | 75.0 | 76.3 | 77.1 | 78.1 | 80.0 | 80.6 | 83.5 | 89.6 | 89.8 | 86.7 | 79.5 | 73.0 | 165.9 |
| 630 | 74.5 | 75.1 | 76.6 | 76.9 | 78.8 | 81.0 | 80.7 | 83.5 | 88.7 | 88.6 | 84.6 | 78.3 | 71.8 | 165.4 |
| 800 | 76.4 | 77.3 | 77.7 | 77.8 | 79.5 | 81.5 | 81.6 | 83.1 | 88.1 | 87.3 | 83.2 | 75.6 | 70.3 | 165.3 |
| 1000 | 75.8 | 78.4 | 80.1 | 79.4 | 80.6 | 80.7 | 80.6 | 82.2 | 86.5 | 86.3 | 81.2 | 75.0 | 68.7 | 165.1 |
| 1250 | 73.6 | 76.8 | 78.8 | 80.3 | 81.0 | 82.1 | 80.3 | 81.9 | 84.6 | 84.2 | 79.3 | 73.7 | 68.3 | 164.8 |
| 1800 | 71.6 | 74.6 | 77.1 | 78.4 | 79.3 | 80.6 | 78.9 | 80.0 | 83.3 | 83.0 | 77.1 | 71.6 | 65.9 | 164.7 |
| 2000 | 69.5 | 73.9 | 75.5 | 75.2 | 79.5 | 79.8 | 78.3 | 78.8 | 81.4 | 80.3 | 74.1 | 66.7 | 62.5 | 164.7 |
| 2500 | 65.8 | 71.5 | 74.6 | 75.7 | 79.2 | 78.8 | 75.0 | 76.0 | 79.1 | 75.6 | 68.5 | 62.2 | 55.2 | 164.7 |
| 3150 | 59.8 | 67.9 | 70.3 | 73.5 | 75.2 | 75.4 | 71.6 | 70.6 | 73.1 | 70.8 | 63.6 | 54.1 | 43.3 | 164.6 |
| 4000 | 51.6 | 58.3 | 63.5 | 65.0 | 66.2 | 66.9 | 65.2 | 63.6 | 66.0 | 61.4 | 53.6 | 41.2 | 25.3 | 163.4 |
| 5000 | 36.9 | 44.5 | 52.5 | 56.4 | 59.7 | 59.9 | 54.9 | 53.9 | 55.4 | 47.7 | 38.4 | 22.7 | | 163.2 |
| 6300 | 16.1 | 27.0 | 36.2 | 41.1 | 41.7 | 42.7 | 39.8 | 36.4 | 39.3 | 27.3 | 14.2 | | | 162.3 |
| 8000 | | | | | | | | | | | | | | 160.5 |
| 10000 | | | | | | | | | | | | | | 158.5 |

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OASPL 65.8 67.3 69.0 69.2 90.9 91.8 91.3 93.4 99.6 100.6 99.6 94.0 87.3 178.0

PNL 92.4 95.5 97.8 98.6 101.1 101.5 99.9 101.1 105.7 106.0 103.2 96.5 90.2

PNLT 92.4 95.5 98.6 99.3 102.3 102.6 99.9 101.1 106.4 106.0 103.2 96.5 90.2

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 IALPHA 3859 TAMB 29.48
LOCATION C41 ANECH CH AERO. RDG. ADH103 PAMB 29.5400 RELHUM 42.70MODEL TEST POINT ACQUSTIC RANGE SIZE FREE-JET SPEED
7000 7017 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.65 M/SEC (386.0 FPS)

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMCDL X70180
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 86.5 | 91.3 | 89.8 | 90.9 | 91.2 | 93.1 | 98.0 | 97.4 | 101.8 | 106.9 | 111.3 | 114.7 | 114.4 | 147.9 |
| 315 | 87.1 | 89.9 | 90.4 | 90.7 | 93.1 | 94.9 | 95.6 | 97.0 | 104.2 | 108.8 | 112.9 | 116.3 | 115.0 | 149.3 |
| 400 | 88.9 | 91.9 | 91.2 | 91.0 | 92.3 | 94.5 | 96.6 | 98.3 | 105.5 | 112.8 | 115.9 | 117.8 | 115.3 | 151.3 |
| 500 | 90.2 | 92.0 | 93.3 | 93.3 | 94.9 | 96.0 | 97.7 | 98.8 | 106.6 | 114.1 | 117.3 | 118.9 | 115.8 | 152.5 |
| 630 | 91.1 | 93.4 | 93.7 | 93.9 | 102.0 | 97.2 | 99.0 | 101.7 | 108.7 | 114.2 | 118.1 | 118.8 | 117.0 | 153.0 |
| 800 | 95.1 | 94.7 | 95.2 | 96.0 | 96.3 | 98.4 | 100.3 | 103.0 | 110.0 | 114.8 | 118.9 | 119.8 | 117.5 | 153.9 |
| 1000 | 99.2 | 100.0 | 99.6 | 98.1 | 98.2 | 99.8 | 101.7 | 104.1 | 111.1 | 113.9 | 118.5 | 119.9 | 117.6 | 153.8 |
| 1250 | 95.6 | 99.4 | 99.7 | 100.0 | 100.6 | 102.2 | 103.1 | 105.0 | 111.6 | 113.0 | 119.9 | 120.3 | 116.5 | 154.3 |
| 1500 | 97.7 | 97.1 | 97.4 | 97.9 | 99.0 | 101.8 | 103.2 | 105.6 | 112.5 | 113.5 | 119.9 | 119.1 | 115.4 | 154.0 |
| 2000 | 97.9 | 100.7 | 99.2 | 98.7 | 98.8 | 100.4 | 102.8 | 106.0 | 112.1 | 114.1 | 119.0 | 117.0 | 112.5 | 153.0 |
| 2500 | 97.8 | 98.6 | 99.4 | 99.4 | 100.0 | 101.6 | 103.5 | 106.4 | 112.3 | 114.8 | 118.7 | 114.9 | 110.6 | 152.7 |
| 3150 | 97.8 | 99.9 | 98.7 | 99.7 | 100.0 | 101.9 | 104.0 | 106.9 | 112.8 | 114.1 | 117.0 | 114.1 | 109.1 | 152.0 |
| 4000 | 96.9 | 98.5 | 98.5 | 98.5 | 99.0 | 101.4 | 103.3 | 106.5 | 112.1 | 114.4 | 115.3 | 111.9 | 107.4 | 151.1 |
| 5000 | 96.0 | 97.6 | 98.1 | 98.3 | 99.4 | 102.0 | 103.6 | 106.8 | 111.2 | 114.2 | 114.1 | 110.5 | 106.8 | 150.6 |
| 6300 | 93.9 | 97.3 | 98.3 | 98.5 | 99.8 | 102.2 | 103.6 | 105.8 | 110.7 | 112.9 | 112.7 | 109.5 | 106.2 | 149.9 |
| 8000 | 93.0 | 96.6 | 96.5 | 97.6 | 99.9 | 101.1 | 102.9 | 105.0 | 109.7 | 111.3 | 111.1 | 108.0 | 105.1 | 149.0 |
| 10000 | 91.4 | 95.5 | 96.6 | 97.3 | 99.4 | 101.5 | 102.2 | 104.5 | 108.5 | 109.8 | 109.0 | 108.0 | 103.9 | 148.4 |
| 12500 | 89.2 | 95.0 | 95.4 | 96.6 | 98.1 | 100.0 | 101.0 | 102.8 | 106.2 | 107.4 | 106.7 | 105.3 | 102.2 | 147.1 |
| 16000 | 86.7 | 93.6 | 95.0 | 96.3 | 98.3 | 99.8 | 98.7 | 100.8 | 103.7 | 105.9 | 104.3 | 103.9 | 101.4 | 146.8 |
| 20000 | 82.4 | 91.0 | 92.0 | 93.9 | 97.9 | 98.2 | 96.1 | 97.7 | 100.8 | 102.5 | 101.2 | 100.3 | 97.8 | 145.8 |
| 25000 | 81.5 | 87.8 | 89.5 | 90.1 | 95.0 | 95.2 | 93.0 | 92.9 | 98.3 | 97.8 | 97.4 | 95.2 | 95.5 | 144.5 |
| 31500 | 79.5 | 83.0 | 87.3 | 89.7 | 90.0 | 90.3 | 89.7 | 90.7 | 94.3 | 96.1 | 94.7 | 90.2 | 89.8 | 144.4 |
| 40000 | 75.2 | 79.2 | 81.7 | 84.2 | 88.5 | 88.2 | 84.5 | 85.3 | 89.5 | 90.3 | 89.6 | 85.0 | 85.2 | 143.8 |
| 50000 | 67.8 | 72.1 | 74.6 | 77.8 | 79.8 | 80.3 | 79.5 | 78.4 | 84.9 | 84.6 | 83.4 | 81.2 | 78.9 | 142.0 |
| 63000 | 62.3 | 65.5 | 69.0 | 71.2 | 71.8 | 71.7 | 73.7 | 72.1 | 81.4 | 78.4 | 77.6 | 75.7 | 74.0 | 141.9 |
| 80000 | 56.5 | 59.8 | 63.0 | 66.7 | 65.7 | 66.1 | 66.9 | 66.3 | 74.9 | 73.7 | 73.2 | 69.1 | 67.6 | 142.9 |
| OASPL | 107.8 | 109.9 | 109.9 | 110.2 | 111.8 | 113.2 | 114.6 | 117.1 | 122.9 | 125.7 | 129.3 | 129.2 | 126.4 | 164.7 |

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TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAMB 27.68
LOCATION C41 ANECH CH AERO. RDG. ADH084 PAMB 29.3290 RELNUM 29.00

MODEL TEST POINT 7018 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED 0. M/SEC (0. FPS)

07/19/79 10.662

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F. 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X70180

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

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GASPL 107.8 109.9 109.9 110.2 111.8 113.2 114.6 117.1 122.9 125.7 129.3 129.2 126.4 164.7

MODEL/FULL SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES
INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAMB 27.68
LOCATION C41 ANECH CH AERO. RDG. ADH084 PAMB 29.3290 RELHUM 29.00

MODEL TEST POINT 7018 ACQUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

53

07/19/79 19.682

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X70181

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 67.1 | 71.7 | 72.0 | 72.5 | 74.3 | 75.5 | 78.5 | 79.8 | 86.3 | 92.5 | 94.1 | 93.9 | 87.9 | 169.0 |
| 63 | 68.4 | 71.8 | 74.1 | 74.9 | 76.9 | 78.1 | 79.6 | 80.4 | 87.4 | 93.9 | 95.4 | 94.9 | 88.5 | 170.1 |
| 80 | 69.2 | 73.1 | 74.4 | 75.4 | 78.9 | 79.2 | 80.9 | 83.2 | 89.4 | 93.9 | 96.3 | 94.7 | 89.5 | 170.7 |
| 100 | 73.2 | 74.3 | 75.9 | 77.4 | 78.2 | 80.4 | 82.2 | 84.4 | 90.7 | 94.4 | 97.0 | 95.6 | 89.9 | 171.5 |
| 125 | 77.2 | 79.6 | 80.2 | 79.5 | 80.0 | 81.7 | 83.5 | 85.5 | 91.7 | 93.4 | 96.5 | 95.6 | 89.7 | 171.5 |
| 160 | 73.4 | 78.8 | 80.2 | 81.2 | 82.2 | 84.0 | 84.7 | 86.2 | 92.1 | 92.4 | 97.6 | 95.7 | 88.2 | 172.0 |
| 200 | 75.2 | 76.3 | 77.7 | 79.0 | 80.5 | 83.5 | 84.7 | 86.7 | 92.8 | 92.6 | 97.4 | 94.2 | 86.7 | 171.7 |
| 250 | 75.1 | 79.6 | 79.3 | 79.6 | 80.1 | 81.9 | 84.1 | 86.8 | 92.2 | 93.0 | 96.2 | 91.6 | 83.1 | 170.7 |
| 315 | 74.6 | 77.2 | 79.2 | 80.0 | 81.0 | 82.8 | 84.5 | 87.0 | 92.1 | 93.3 | 95.4 | 89.0 | 80.5 | 170.4 |
| 400 | 74.1 | 78.0 | 78.1 | 79.9 | 80.7 | 82.7 | 84.7 | 87.2 | 92.2 | 92.2 | 93.2 | 87.6 | 78.0 | 169.6 |
| 500 | 72.7 | 76.2 | 77.6 | 78.4 | 79.5 | 82.0 | 83.8 | 86.4 | 91.2 | 92.1 | 91.1 | 84.7 | 75.3 | 168.8 |
| 630 | 71.3 | 74.9 | 76.8 | 78.0 | 79.6 | 82.3 | 83.8 | 86.5 | 90.0 | 91.6 | 89.4 | 82.6 | 73.5 | 168.3 |
| 800 | 68.7 | 74.3 | 76.8 | 77.9 | 79.7 | 82.3 | 83.5 | 85.2 | 89.2 | 89.9 | 87.5 | 81.0 | 71.9 | 167.6 |
| 1000 | 67.4 | 73.3 | 74.8 | 76.9 | 79.7 | 81.1 | 82.7 | 84.2 | 87.9 | 88.0 | 85.5 | 78.8 | 69.6 | 166.6 |
| 1250 | 65.2 | 72.8 | 74.6 | 76.3 | 79.0 | 81.4 | 81.8 | 83.5 | 86.5 | 86.1 | 82.8 | 78.0 | 67.0 | 166.1 |
| 1600 | 62.2 | 70.8 | 73.0 | 75.3 | 77.5 | 79.6 | 80.3 | 81.5 | 83.8 | 83.2 | 79.6 | 62.9 | 164.8 | |
| 2000 | 58.7 | 68.8 | 72.2 | 74.8 | 77.5 | 79.2 | 77.9 | 79.3 | 80.9 | 81.1 | 76.3 | 70.8 | 59.1 | 164.5 |
| 2500 | 52.6 | 64.9 | 68.3 | 71.7 | 76.6 | 77.2 | 74.8 | 75.5 | 77.1 | 76.5 | 71.5 | 64.4 | 50.6 | 163.4 |
| 3150 | 48.3 | 59.3 | 64.0 | 66.4 | 72.3 | 72.8 | 70.2 | 69.2 | 72.7 | 69.3 | 64.3 | 54.3 | 39.9 | 162.2 |
| 4000 | 40.1 | 49.8 | 57.9 | 62.7 | 64.3 | 65.0 | 64.0 | 63.7 | 64.9 | 62.8 | 55.3 | 40.5 | 19.7 | 162.1 |
| 5000 | 26.1 | 38.4 | 46.1 | 51.8 | 57.8 | 58.0 | 53.8 | 52.8 | 53.9 | 49.6 | 40.5 | 21.5 | 161.5 | |
| 6300 | 0.9 | 17.1 | 26.9 | 34.6 | 39.0 | 40.3 | 38.7 | 35.2 | 37.2 | 29.6 | 16.5 | | 159.7 | |
| 8000 | | | | | | | | | | | | | 159.5 | |
| 10000 | | | | | | | | | | | | | 160.6 | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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QASPL 84.6 86.2 89.4 90.4 92.4 93.9 95.3 97.3 102.5 104.2 106.5 104.1 97/6 162.2
 PNL 86.4 93.5 95.5 97.5 100.4 101.7 101.8 103.4 107.6 109.5 109.2 105.2 97.2
 PNL T 89.7 94.6 95.5 97.5 101.8 102.9 101.8 103.4 107.8 108.5 110.2 105.2 98.3

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAMB 27.68
 LOCATION C41 ANECH CH AERO. RDG. ADH084 PAMB 29.3290 RELHUM 29.00

MODEL TEST POINT 7018 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. FREE-JET SPEED 0. M/SEC (0. FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 88 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FM0DL K70190
BACKGROUND FJ300-FM0DL K01300

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

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TEST DATE 02-27-78 TAPE NO. N299 ALPHA 3859 TAMP 29.12
LOCATION C41 ANECH CH AERO. RDG. ADH101 PAMB 29.5400 RELNUM 42.40

MODEL TEST POINT 7019 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 89.61 M/SEC (294.0 FPS) FREE-JET SPEED

535

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X70190

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | 67.3 | 69.5 | 68.3 | 69.2 | 67.6 | 69.3 | 90.0 | 90.9 | 97.3 | 103.4 | 105.6 | 109.6 | 109.0 | 142.9 |
| 63 | 67.3 | 69.5 | 68.3 | 69.4 | 69.6 | 90.3 | 90.5 | 91.3 | 99.4 | 106.1 | 109.7 | 112.4 | 110.1 | 145.5 |
| 80 | 69.1 | 69.7 | 69.4 | 69.9 | 69.6 | 91.1 | 91.2 | 92.6 | 101.5 | 108.3 | 112.6 | 114.1 | 110.7 | 147.5 |
| 100 | 90.7 | 90.5 | 90.5 | 91.1 | 91.0 | 92.2 | 92.6 | 94.3 | 103.6 | 103.9 | 113.0 | 114.4 | 109.5 | 147.8 |
| 125 | 91.5 | 91.1 | 92.1 | 91.7 | 95.1 | 93.9 | 94.1 | 96.4 | 105.7 | 110.4 | 113.1 | 114.6 | 109.0 | 148.3 |
| 160 | 92.1 | 91.7 | 93.0 | 93.3 | 93.5 | 95.2 | 95.1 | 97.4 | 107.0 | 110.1 | 112.5 | 113.2 | 107.8 | 147.8 |
| 200 | 95.1 | 92.5 | 93.8 | 93.9 | 94.6 | 95.9 | 96.5 | 98.7 | 107.0 | 109.2 | 112.8 | 112.4 | 105.6 | 147.5 |
| 250 | 96.3 | 93.8 | 95.3 | 95.8 | 96.1 | 97.6 | 97.4 | 100.1 | 108.3 | 110.0 | 112.8 | 109.9 | 104.8 | 147.5 |
| 315 | 94.8 | 96.0 | 95.6 | 95.5 | 96.3 | 98.3 | 98.3 | 101.0 | 108.3 | 110.2 | 113.2 | 108.7 | 104.5 | 147.6 |
| 400 | 97.4 | 94.7 | 95.6 | 95.7 | 96.0 | 97.8 | 98.1 | 101.2 | 108.2 | 111.6 | 114.3 | 108.5 | 105.1 | 148.5 |
| 500 | 97.3 | 96.3 | 96.7 | 97.0 | 97.3 | 99.2 | 99.7 | 102.1 | 109.8 | 111.3 | 113.7 | 110.0 | 105.6 | 148.7 |
| 630 | 98.2 | 97.5 | 98.4 | 98.0 | 98.1 | 99.9 | 100.5 | 103.7 | 109.6 | 111.5 | 112.7 | 107.3 | 104.5 | 148.3 |
| 800 | 99.5 | 98.6 | 98.3 | 98.0 | 98.4 | 100.1 | 100.2 | 103.4 | 109.7 | 112.5 | 112.4 | 106.6 | 104.2 | 148.6 |
| 1000 | 99.6 | 98.8 | 98.7 | 98.9 | 98.9 | 100.9 | 101.0 | 104.4 | 109.7 | 111.9 | 111.5 | 106.3 | 104.2 | 148.5 |
| 1250 | 99.4 | 98.2 | 99.0 | 99.0 | 99.3 | 101.9 | 101.3 | 104.0 | 109.6 | 111.4 | 110.1 | 104.9 | 102.8 | 148.2 |
| 1600 | 98.8 | 98.7 | 99.4 | 99.1 | 100.0 | 102.0 | 101.5 | 104.4 | 108.5 | 110.4 | 108.5 | 104.9 | 102.4 | 147.8 |
| 2000 | 98.3 | 98.4 | 98.3 | 98.9 | 100.2 | 102.7 | 100.9 | 103.7 | 106.3 | 108.7 | 106.3 | 103.2 | 101.7 | 147.0 |
| 2500 | 97.8 | 97.8 | 98.5 | 99.7 | 100.6 | 100.1 | 101.8 | 104.6 | 107.5 | 105.3 | 102.4 | 101.0 | 146.7 | |
| 3150 | 96.3 | 97.4 | 97.6 | 99.1 | 99.7 | 100.6 | 98.9 | 100.4 | 102.6 | 105.0 | 102.7 | 100.3 | 101.4 | 146.6 |
| 4000 | 94.5 | 96.2 | 97.3 | 98.0 | 99.7 | 99.8 | 96.5 | 98.0 | 101.6 | 101.5 | 100.0 | 98.9 | 101.0 | 146.7 |
| 5000 | 91.6 | 94.8 | 95.2 | 95.5 | 97.9 | 97.5 | 94.3 | 94.3 | 97.0 | 99.2 | 97.0 | 93.5 | 94.4 | 146.1 |
| 6300 | 90.1 | 90.6 | 92.5 | 94.0 | 92.4 | 92.4 | 90.7 | 90.1 | 93.7 | 94.7 | 93.5 | 89.9 | 92.4 | 145.5 |
| 8000 | 85.4 | 84.9 | 88.7 | 88.9 | 91.3 | 90.5 | 85.6 | 86.0 | 89.9 | 89.0 | 87.6 | 84.9 | 86.5 | 145.5 |
| 10000 | 82.2 | 81.1 | 84.2 | 82.5 | 83.4 | 83.4 | 81.0 | 78.6 | 85.7 | 81.8 | 81.7 | 78.2 | 80.0 | 144.0 |
| 12500 | 74.1 | 73.8 | 75.9 | 74.8 | 74.7 | 74.8 | 75.0 | 71.6 | 79.7 | 77.4 | 77.5 | 70.3 | 72.6 | 142.4 |
| 16000 | 65.0 | 64.2 | 66.6 | 70.9 | 68.0 | 69.0 | 66.8 | 65.4 | 69.9 | 67.6 | 67.7 | 60.5 | 62.8 | 141.2 |
| 20000 | 109.6 | 109.2 | 109.8 | 109.9 | 110.7 | 112.2 | 111.6 | 114.2 | 120.2 | 122.8 | 124.4 | 123.2 | 119.4 | 161.2 |

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 294.00 REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 46.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 3859 TAMB 29.12
 LOCATION C41 ANECH CH AERO. RDG. ADH101 PAMB 29.5400 RELHUM 42.40

MODEL TEST POINT 7019 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CH (23.99 SQ IN) - MODEL 89.61 M/SEC (294.0 FPS) FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X70191

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 67.3 | 69.5 | 70.3 | 70.4 | 71.6 | 73.2 | 73.1 | 74.0 | 82.4 | 88.0 | 90.8 | 90.1 | 83.4 | 165.1 |
| 63 | 68.9 | 70.2 | 71.3 | 72.6 | 72.9 | 74.3 | 74.5 | 75.6 | 84.4 | 88.6 | 91.1 | 90.4 | 82.1 | 165.5 |
| 80 | 69.6 | 70.8 | 72.8 | 73.2 | 77.0 | 75.9 | 76.0 | 77.9 | 86.5 | 90.0 | 91.2 | 90.5 | 81.5 | 166.0 |
| 100 | 70.1 | 71.4 | 73.7 | 74.7 | 75.3 | 77.2 | 76.9 | 78.6 | 87.7 | 89.8 | 90.6 | 89.0 | 80.2 | 165.4 |
| 125 | 73.1 | 72.1 | 74.4 | 75.2 | 76.4 | 77.8 | 78.2 | 80.0 | 87.6 | 88.7 | 90.7 | 88.1 | 77.8 | 165.1 |
| 160 | 74.0 | 73.1 | 75.8 | 77.0 | 77.7 | 79.3 | 79.0 | 81.3 | 88.8 | 89.3 | 90.5 | 85.3 | 76.6 | 165.1 |
| 200 | 72.3 | 75.2 | 76.8 | 76.6 | 77.8 | 80.0 | 79.8 | 82.1 | 88.6 | 89.4 | 90.7 | 83.8 | 75.8 | 165.2 |
| 250 | 74.6 | 73.6 | 75.8 | 76.6 | 77.3 | 79.2 | 79.4 | 82.1 | 88.3 | 89.5 | 91.5 | 84.2 | 75.7 | 166.1 |
| 315 | 74.1 | 74.9 | 76.4 | 77.6 | 78.4 | 80.3 | 80.7 | 82.7 | 89.6 | 89.8 | 90.5 | 84.1 | 75.4 | 166.3 |
| 400 | 74.5 | 75.7 | 77.8 | 78.2 | 78.8 | 80.8 | 81.2 | 83.9 | 89.0 | 89.7 | 88.9 | 80.8 | 73.3 | 166.0 |
| 500 | 75.3 | 76.4 | 77.4 | 78.0 | 78.9 | 80.7 | 80.6 | 83.3 | 88.8 | 90.2 | 88.1 | 79.6 | 72.0 | 166.2 |
| 630 | 74.9 | 75.4 | 77.5 | 78.3 | 79.1 | 81.2 | 81.1 | 84.1 | 88.5 | 89.3 | 86.8 | 78.5 | 71.0 | 166.1 |
| 800 | 74.2 | 75.2 | 77.5 | 78.4 | 79.2 | 82.0 | 81.2 | 83.4 | 88.1 | 88.4 | 84.9 | 76.3 | 68.4 | 165.8 |
| 1000 | 73.2 | 75.4 | 77.6 | 78.3 | 79.3 | 82.0 | 81.3 | 83.6 | 86.7 | 87.1 | 82.8 | 75.7 | 66.9 | 165.5 |
| 1250 | 72.2 | 74.8 | 76.3 | 78.0 | 79.8 | 82.6 | 80.6 | 82.7 | 84.3 | 85.0 | 80.1 | 73.1 | 64.8 | 164.7 |
| 1600 | 70.7 | 73.6 | 76.4 | 77.3 | 79.1 | 80.3 | 79.4 | 80.6 | 82.2 | 83.3 | 78.2 | 71.0 | 61.7 | 164.4 |
| 2000 | 68.3 | 72.6 | 74.8 | 77.6 | 78.9 | 80.0 | 78.1 | 78.9 | 80.0 | 80.2 | 74.7 | 67.3 | 59.1 | 164.2 |
| 2500 | 64.7 | 70.1 | 73.6 | 75.8 | 78.4 | 78.7 | 75.1 | 75.6 | 77.9 | 75.5 | 70.2 | 63.1 | 53.8 | 164.3 |
| 3150 | 58.4 | 66.3 | 69.7 | 71.8 | 75.2 | 75.1 | 71.6 | 70.5 | 71.5 | 70.7 | 63.8 | 52.6 | 38.8 | 163.8 |
| 4000 | 50.7 | 57.4 | 63.1 | 67.0 | 66.7 | 67.1 | 65.0 | 63.1 | 64.4 | 61.5 | 54.1 | 40.2 | 22.3 | 163.2 |
| 5000 | 36.2 | 44.1 | 53.1 | 56.4 | 60.6 | 60.4 | 55.1 | 53.6 | 54.3 | 47.2 | 38.4 | 21.4 | | 163.1 |
| 6300 | 15.2 | 26.1 | 36.6 | 39.2 | 42.6 | 43.4 | 40.2 | 35.4 | 38.0 | 26.8 | 14.8 | | | 161.6 |
| 8000 | | | 6.9 | 12.3 | 15.8 | 17.0 | 18.1 | 9.1 | 10.7 | | | | | 160.1 |
| 10000 | | | | | | | | | | | | | | 158.9 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| GASPL | 85.2 | 86.4 | 88.5 | 89.4 | 90.7 | 92.5 | 91.9 | 94.1 | 99.6 | 101.0 | 101.3 | 97.9 | 89.6 | 178.6 |
| PNL | 91.5 | 94.4 | 97.2 | 98.6 | 100.7 | 101.8 | 100.1 | 101.5 | 105.3 | 105.3 | 104.9 | 98.7 | 89.8 | |
| PNLT | 91.5 | 94.4 | 97.9 | 99.4 | 102.1 | 102.9 | 100.6 | 101.5 | 105.9 | 106.2 | 104.9 | 98.7 | 90.9 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 3859 TAMP 29.12
LOCATION C41 ANECH CH AERO. RDG. ADH101 PAMB 29.5400 RELNUM 42.40

MODEL TEST POINT 7019 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 89.61 M/SEC (294.0 FPS)
FREE-JET SPEED

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X70200
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL
50 382.2
63
80

100
125
160
200

250 81.8 84.3 84.3 85.4 86.0 88.4 80.1 93.0 97.8 102.4 107.5 111.0 110.6 144.0
315 83.0 84.3 85.3 85.6 87.2 89.6 90.2 92.9 99.6 105.0 109.1 112.3 110.0 145.2
400 85.3 85.3 86.7 85.8 87.7 89.9 90.7 93.4 100.2 108.3 111.4 112.8 108.0 146.3
500 85.2 85.7 87.7 87.8 89.6 91.0 91.9 94.8 101.5 109.9 113.5 112.9 105.6 147.4
630 86.3 86.8 88.3 88.9 90.0 93.1 93.5 96.9 104.6 110.2 114.1 112.3 101.9 147.7
800 88.3 87.1 89.1 89.9 91.3 94.1 95.3 98.7 106.2 111.0 113.9 110.6 100.0 147.6
1000 89.2 88.5 90.7 90.5 92.4 95.2 96.4 100.0 107.5 110.8 112.5 107.4 97.5 146.9
1250 88.8 90.6 92.4 92.4 93.0 96.1 97.2 100.9 107.8 110.5 112.3 105.5 95.9 146.7
1600 91.2 89.0 91.3 92.3 94.1 97.0 98.4 101.8 108.4 110.9 112.3 103.8 95.8 146.9
2000 91.3 91.1 92.4 92.2 93.2 96.4 97.7 102.2 109.3 111.5 111.9 102.9 95.6 147.2
2500 92.5 92.8 94.1 93.6 94.2 97.0 99.2 102.8 109.2 112.0 112.4 103.8 96.3 147.6
3150 92.8 93.1 94.2 94.7 95.5 98.1 99.7 104.2 110.3 111.6 112.2 105.1 97.1 147.9
4000 93.2 93.0 94.6 94.0 95.9 97.7 99.6 103.6 109.2 111.2 111.6 104.0 96.5 147.4
5000 93.9 93.5 95.0 95.0 96.0 98.6 100.5 104.2 109.2 111.9 110.3 103.7 96.2 147.6
6300 93.7 93.6 95.9 95.1 96.3 99.7 100.4 103.6 109.0 110.8 109.3 102.5 95.7 147.1
8000 92.6 93.0 94.2 94.8 96.6 98.7 99.7 103.1 108.8 109.7 107.2 100.4 94.4 146.6
10000 92.8 93.5 94.6 94.7 97.0 99.2 99.1 103.2 107.5 108.8 105.9 100.0 93.6 146.3
12500 92.1 92.8 94.0 94.8 95.8 98.2 97.9 101.6 104.5 105.8 103.4 98.2 93.2 144.8
16000 90.9 92.5 94.1 94.4 96.3 97.8 96.7 100.4 102.6 104.4 100.7 96.6 91.9 144.7
20000 86.4 90.3 91.9 92.9 95.7 96.8 93.9 97.3 100.2 101.0 97.6 94.3 90.3 144.0
25000 85.7 87.4 89.7 89.2 93.8 94.7 91.5 93.0 97.9 96.1 93.1 90.2 88.3 143.2
31500 84.5 83.7 87.4 89.5 89.3 89.6 88.2 89.5 93.0 94.6 91.1 85.8 82.6 143.0
40000 79.3 79.1 82.6 83.8 87.3 88.3 83.6 84.4 87.6 88.1 85.8 80.8 78.5 142.4
50000 72.4 72.5 75.5 77.2 79.1 80.3 79.0 77.5 83.5 81.1 79.3 76.3 72.2 140.4
63000 67.1 65.5 68.7 70.5 70.9 72.0 73.1 71.2 78.8 74.1 72.8 68.2 66.3 139.4
80000 60.0 58.9 62.1 65.8 64.2 66.2 64.7 64.7 71.3 67.4 67.3 59.9 57.6 139.4

GASPL 103.9 104.2 105.8 106.0 107.8 382.3 110.6 114.3 120.1 122.8 124.0 121.0 115.9 382.2

TEST DATE 02-27-78 TAPE NO. N299 IALPHA 3859 TAMB 28.76
LOCATION C41 ANECH CH AERG. RDG. ADH102 PAMB 29.5400 RELHUM 42.40

MODEL TEST POINT 7020 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 118.26 M/SEC (388.0 FPS) FREE-JET SPEED

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07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X70200

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 89.0 | 90.2 | 88.9 | 88.5 | 87.5 | 88.4 | 88.2 | 89.5 | 96.3 | 100.7 | 104.4 | 108.0 | 107.4 | 141.3 |
| 315 | 89.0 | 90.2 | 88.9 | 88.5 | 88.9 | 89.6 | 88.9 | 90.2 | 98.1 | 105.5 | 106.3 | 110.6 | 108.2 | 144.1 |
| 400 | 90.4 | 90.4 | 90.0 | 88.9 | 89.3 | 90.1 | 90.0 | 91.6 | 99.7 | 107.7 | 111.4 | 112.3 | 108.4 | 146.1 |
| 500 | 91.5 | 90.7 | 90.9 | 88.8 | 91.4 | 91.3 | 91.0 | 92.9 | 102.8 | 108.0 | 112.1 | 112.4 | 106.7 | 146.5 |
| 630 | 92.6 | 91.9 | 92.6 | 91.1 | 98.4 | 93.5 | 92.6 | 94.8 | 104.6 | 109.2 | 112.5 | 112.0 | 107.4 | 147.0 |
| 800 | 96.4 | 95.2 | 94.8 | 93.4 | 93.2 | 94.6 | 94.4 | 96.6 | 106.3 | 109.4 | 111.7 | 109.9 | 107.4 | 146.8 |
| 1000 | 95.8 | 93.3 | 94.0 | 93.4 | 94.4 | 95.8 | 95.6 | 98.0 | 106.5 | 108.9 | 111.3 | 107.7 | 105.4 | 146.0 |
| 1250 | 96.6 | 94.7 | 95.7 | 94.1 | 95.2 | 96.9 | 96.6 | 98.9 | 107.3 | 109.4 | 111.3 | 105.9 | 105.1 | 146.2 |
| 1600 | 96.2 | 96.9 | 97.4 | 96.0 | 96.5 | 98.0 | 97.9 | 100.0 | 108.4 | 110.2 | 111.0 | 105.0 | 104.7 | 146.6 |
| 2000 | 98.6 | 95.3 | 96.3 | 96.0 | 95.8 | 97.6 | 97.5 | 100.6 | 108.7 | 111.1 | 112.0 | 105.6 | 106.2 | 147.4 |
| 2500 | 98.7 | 97.4 | 97.5 | 96.0 | 96.9 | 98.5 | 98.5 | 101.6 | 110.4 | 111.4 | 112.6 | 108.8 | 108.1 | 148.4 |
| 3150 | 99.4 | 98.9 | 99.1 | 97.5 | 98.6 | 100.0 | 100.3 | 103.4 | 109.9 | 111.6 | 112.5 | 108.0 | 107.7 | 148.5 |
| 4000 | 100.2 | 99.5 | 99.5 | 98.9 | 99.4 | 100.1 | 100.7 | 103.4 | 110.0 | 112.3 | 111.0 | 107.4 | 106.9 | 148.5 |
| 5000 | 100.5 | 99.5 | 100.1 | 98.5 | 100.0 | 101.6 | 102.0 | 104.3 | 109.9 | 111.3 | 110.2 | 105.5 | 105.7 | 148.3 |
| 6300 | 101.1 | 100.0 | 100.7 | 99.7 | 100.3 | 102.7 | 101.8 | 103.7 | 109.8 | 110.3 | 108.1 | 104.1 | 104.9 | 147.8 |
| 8000 | 100.7 | 99.9 | 101.4 | 99.6 | 100.5 | 101.7 | 101.2 | 103.2 | 108.7 | 109.6 | 107.0 | 104.0 | 104.4 | 147.5 |
| 10000 | 99.5 | 99.2 | 99.5 | 99.2 | 101.0 | 102.2 | 100.8 | 103.2 | 106.6 | 107.6 | 105.9 | 104.0 | 106.2 | 147.1 |
| 12500 | 99.4 | 99.4 | 99.7 | 98.9 | 99.8 | 101.2 | 99.9 | 102.2 | 105.6 | 107.1 | 104.0 | 103.4 | 105.8 | 147.1 |
| 16000 | 98.2 | 98.5 | 98.4 | 98.4 | 100.3 | 100.8 | 98.9 | 101.3 | 104.3 | 105.0 | 102.2 | 102.1 | 105.1 | 147.3 |
| 20000 | 96.6 | 97.5 | 98.2 | 97.6 | 100.2 | 99.8 | 98.3 | 98.8 | 102.7 | 100.3 | 97.4 | 97.3 | 101.9 | 146.8 |
| 25000 | 94.2 | 96.9 | 97.1 | 96.7 | 98.4 | 97.7 | 93.7 | 94.5 | 98.1 | 99.4 | 96.6 | 94.6 | 98.6 | 146.9 |
| 31500 | 92.7 | 93.2 | 94.1 | 92.2 | 93.3 | 92.6 | 90.5 | 90.7 | 94.7 | 94.9 | 92.8 | 90.7 | 95.0 | 146.1 |
| 40000 | 88.0 | 86.5 | 89.3 | 90.5 | 91.8 | 91.3 | 86.1 | 86.3 | 80.9 | 88.3 | 87.0 | 86.0 | 89.7 | 146.3 |
| 50000 | 85.0 | 83.7 | 85.8 | 85.5 | 83.6 | 83.3 | 81.5 | 79.4 | 87.0 | 82.2 | 81.5 | 80.1 | 85.1 | 145.4 |
| 63000 | 77.2 | 76.1 | 77.7 | 77.9 | 74.8 | 75.0 | 75.5 | 73.0 | 80.2 | 76.1 | 76.7 | 72.7 | 77.7 | 143.4 |
| 80000 | 67.7 | 65.5 | 67.8 | 68.7 | 68.2 | 69.2 | 67.0 | 66.0 | 70.4 | 66.3 | 66.9 | 62.9 | 67.9 | 141.4 |
| CASPL | 111.0 | 110.4 | 110.9 | 109.9 | 111.3 | 112.2 | 111.5 | 113.6 | 120.3 | 122.3 | 123.2 | 121.2 | 119.6 | 160.8 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 388.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | SB59 | TAPB | 28.76 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH102 | PAMB | 29.5400 | RELHUM | 42.40 |

| MODEL | TEST POINT | ACUSTIC RANGE | 12.2 M (40.0 FT) | ARC | 154.7 SQ CM (23.99 SQ IN) | MODEL | 118.26 M/SEC (388.0 FPS) |
|-------|------------|---------------|-------------------|-----|----------------------------|-------|---------------------------|
| 7000 | 7020 | | | | | | |

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X70201

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 68.6 | 70.2 | 70.9 | 70.4 | 71.3 | 72.2 | 71.9 | 73.2 | 80.6 | 87.4 | 89.6 | 88.3 | 81.1 | 163.7 |
| 63 | 69.7 | 70.4 | 71.7 | 70.4 | 73.4 | 73.3 | 72.9 | 74.5 | 83.6 | 87.7 | 90.3 | 88.4 | 79.3 | 164.1 |
| 80 | 70.7 | 71.6 | 73.3 | 72.6 | 80.3 | 75.5 | 74.5 | 76.3 | 85.4 | 88.9 | 90.7 | 87.9 | 79.9 | 164.7 |
| 100 | 74.5 | 74.9 | 75.6 | 74.8 | 75.1 | 76.6 | 76.3 | 78.1 | 87.0 | 89.0 | 89.7 | 85.7 | 79.7 | 164.2 |
| 125 | 73.7 | 72.9 | 74.7 | 74.7 | 76.2 | 77.8 | 77.4 | 79.4 | 87.1 | 88.4 | 89.2 | 83.4 | 77.6 | 163.6 |
| 160 | 74.4 | 74.1 | 76.2 | 75.3 | 76.8 | 78.7 | 78.2 | 80.2 | 87.8 | 88.8 | 89.1 | 81.3 | 76.9 | 163.8 |
| 200 | 73.7 | 76.0 | 77.7 | 77.1 | 78.0 | 79.6 | 79.4 | 81.1 | 88.7 | 89.3 | 88.5 | 80.1 | 75.9 | 164.3 |
| 250 | 75.7 | 74.2 | 76.4 | 76.9 | 77.1 | 79.0 | 78.8 | 81.4 | 88.8 | 90.0 | 89.2 | 81.2 | 76.8 | 165.0 |
| 315 | 75.4 | 76.0 | 77.3 | 76.6 | 77.9 | 79.7 | 80.3 | 82.2 | 90.2 | 89.9 | 89.3 | 82.9 | 78.0 | 166.1 |
| 400 | 75.7 | 77.0 | 78.6 | 77.7 | 79.3 | 80.9 | 81.0 | 83.7 | 89.3 | 89.8 | 88.7 | 81.5 | 76.5 | 166.2 |
| 500 | 76.0 | 77.3 | 78.6 | 78.8 | 79.8 | 80.8 | 81.1 | 83.3 | 89.1 | 90.1 | 86.8 | 80.2 | 74.8 | 166.2 |
| 630 | 75.8 | 76.9 | 78.9 | 78.2 | 80.2 | 82.0 | 82.2 | 84.0 | 88.7 | 88.6 | 85.4 | 78.6 | 73.5 | 165.9 |
| 800 | 75.9 | 77.0 | 79.1 | 79.1 | 80.2 | 82.8 | 81.8 | 83.1 | 88.3 | 87.3 | 82.9 | 75.6 | 70.6 | 165.5 |
| 1000 | 75.1 | 76.6 | 79.6 | 78.9 | 80.3 | 81.7 | 81.0 | 82.4 | 87.0 | 86.2 | 81.4 | 74.7 | 68.9 | 165.2 |
| 1250 | 73.4 | 75.6 | 77.5 | 78.2 | 80.7 | 82.0 | 80.2 | 82.3 | 84.6 | 84.0 | 79.7 | 73.9 | 69.3 | 164.7 |
| 1600 | 72.4 | 75.1 | 77.3 | 77.6 | 79.2 | 80.8 | 79.3 | 80.9 | 83.1 | 82.9 | 77.0 | 72.0 | 66.5 | 164.7 |
| 2000 | 70.2 | 73.4 | 75.7 | 76.9 | 79.5 | 80.2 | 78.1 | 79.8 | 81.5 | 80.2 | 74.2 | 69.1 | 62.8 | 164.9 |
| 2500 | 66.8 | 71.4 | 74.5 | 75.4 | 78.9 | 78.7 | 75.0 | 76.6 | 79.0 | 74.3 | 67.6 | 61.4 | 54.7 | 164.5 |
| 3150 | 61.1 | 68.4 | 71.5 | 72.9 | 75.6 | 75.3 | 71.0 | 70.7 | 72.5 | 70.9 | 63.4 | 53.8 | 43.0 | 164.6 |
| 4000 | 53.3 | 60.0 | 64.7 | 65.2 | 67.6 | 67.3 | 64.8 | 63.7 | 65.3 | 61.6 | 53.4 | 40.9 | 24.9 | 163.8 |
| 5000 | 38.8 | 45.7 | 53.7 | 53.1 | 61.1 | 61.1 | 55.4 | 53.9 | 55.2 | 47.5 | 37.9 | 22.5 | | 164.0 |
| 6300 | 18.1 | 28.7 | 38.1 | 42.3 | 42.8 | 43.3 | 40.7 | 36.1 | 39.3 | 27.2 | 14.6 | | | 163.1 |
| 8000 | | | 8.7 | 15.4 | 15.9 | 17.2 | 16.6 | 10.5 | 11.2 | | | | | 161.1 |
| 10000 | | | | | | | | | | | | | | 159.0 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GRSPL 86.5 87.6 89.5 89.4 91.3 92.4 91.8 93.6 99.6 100.5 100.1 95.5 89.0 178.3

PWL 93.1 95.6 98.2 98.7 101.2 101.8 100.0 101.6 105.6 105.8 103.8 97.4 91.5

PWLT 93.1 95.6 99.0 99.3 102.6 103.1 100.5 101.6 106.3 106.8 103.8 97.4 91.5

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 28.76
 LOCATION C41 ANECH CH AERG. RDG. ADH102 PAMB 29.5400 RELHUM 42.40

MODEL TEST POINT 7020 ACQUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL FREE-JET SPEED 118.26 M/SEC (388.0 FPS)

07/19/79 10.682

IDENTIFICATION - FJ-ZER-FMODI
R.H. STD. DAY, SB 40.0 FT. ARC
PRESSURE LEVELS
ANGLES

| FREQ | 40. | 50. | 60. | 70. | 80. |
|------|-----|-----|-----|-----|-----|
| 50 | | | | | |

| INLET, DEGREES | 90. | 100. | 110. |
|----------------|-----|------|------|
| 83 | | | |
| 80 | | | |

| | | | | | |
|-----|------|------|------|------|-----|
| 100 | 120. | 130. | 140. | 150. | 160 |
| 125 | | | | | |
| 160 | | | | | |

PVL

ORIGINAL PAGE IS
OF POOR QUALITY

TEST DATE 02-28-1967

REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

| INT | ACQUSTIC RANGE | AERO. RDG. | N294 | ALPHA | SB59 | TAMB | 30.20 | RELNUM | 19.73 |
|-----|-------------------|------------|--------|-------|---------|------|-------|--------|-------|
| | 12.2 M (40.0 FT) | ARC | ADH070 | PAMB | 29.2970 | | | | |

FREE-JET SPEED
M/SEC (0. FPS)

07/19/79 18.682

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X71011

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 64.6 | 69.0 | 69.8 | 70.6 | 72.3 | 74.3 | 76.3 | 77.3 | 83.8 | 89.1 | 90.9 | 91.1 | 85.5 | 166.0 |
| 63 | 65.4 | 69.5 | 71.1 | 71.6 | 75.6 | 75.9 | 76.9 | 78.6 | 84.1 | 90.1 | 91.7 | 91.7 | 85.5 | 166.7 |
| 80 | 66.0 | 70.4 | 71.7 | 73.0 | 84.5 | 76.7 | 78.5 | 80.2 | 86.2 | 89.9 | 92.0 | 91.2 | 86.2 | 167.1 |
| 100 | 69.5 | 71.1 | 72.9 | 74.7 | 76.0 | 77.5 | 79.7 | 82.0 | 88.2 | 90.4 | 91.2 | 90.7 | 85.9 | 166.9 |
| 125 | 72.5 | 74.6 | 76.0 | 76.2 | 77.0 | 79.0 | 80.0 | 82.5 | 88.5 | 90.0 | 89.7 | 90.4 | 85.8 | 166.6 |
| 160 | 69.4 | 74.3 | 75.7 | 76.7 | 78.5 | 80.5 | 81.2 | 83.2 | 88.4 | 89.9 | 90.2 | 90.5 | 85.8 | 167.0 |
| 200 | 71.5 | 72.5 | 74.2 | 76.0 | 77.7 | 80.5 | 81.7 | 84.0 | 89.1 | 89.9 | 89.9 | 91.0 | 85.4 | 167.5 |
| 250 | 71.4 | 74.9 | 75.6 | 76.3 | 77.4 | 79.1 | 80.6 | 83.3 | 89.2 | 90.2 | 90.0 | 89.1 | 82.6 | 167.0 |
| 315 | 70.8 | 73.1 | 75.1 | 76.5 | 78.0 | 80.0 | 81.5 | 84.0 | 88.8 | 90.0 | 89.9 | 88.2 | 79.7 | 166.9 |
| 400 | 71.5 | 74.7 | 75.3 | 76.6 | 77.7 | 79.9 | 81.4 | 83.9 | 88.7 | 88.1 | 88.9 | 85.8 | 77.4 | 166.2 |
| 500 | 70.6 | 73.4 | 74.2 | 75.1 | 76.4 | 78.9 | 80.9 | 83.3 | 87.6 | 87.5 | 87.4 | 83.1 | 74.4 | 165.3 |
| 630 | 70.9 | 74.5 | 75.2 | 75.3 | 76.7 | 79.0 | 80.7 | 83.1 | 86.6 | 86.7 | 85.7 | 81.0 | 72.4 | 164.8 |
| 800 | 69.6 | 74.8 | 76.3 | 77.0 | 77.6 | 78.9 | 80.1 | 82.3 | 85.5 | 85.5 | 84.1 | 79.6 | 71.0 | 164.4 |
| 1000 | 68.0 | 74.1 | 75.8 | 77.4 | 79.1 | 79.9 | 79.3 | 81.3 | 84.4 | 83.0 | 82.0 | 77.4 | 68.7 | 163.6 |
| 1250 | 65.1 | 71.3 | 74.7 | 76.1 | 78.8 | 80.2 | 79.1 | 80.8 | 83.1 | 82.4 | 80.1 | 76.1 | 65.8 | 163.4 |
| 1600 | 61.2 | 68.8 | 71.3 | 74.1 | 76.8 | 78.4 | 78.6 | 78.6 | 80.0 | 78.9 | 76.9 | 72.1 | 62.2 | 162.1 |
| 2000 | 58.0 | 66.6 | 69.9 | 72.6 | 75.8 | 77.0 | 76.2 | 77.3 | 77.4 | 77.1 | 73.4 | 68.4 | 57.6 | 161.7 |
| 2500 | 50.9 | 62.4 | 65.6 | 69.5 | 74.1 | 75.0 | 72.3 | 73.8 | 73.9 | 71.7 | 68.0 | 62.2 | 50.1 | 160.5 |
| 3150 | 46.6 | 56.0 | 61.7 | 64.4 | 70.1 | 70.8 | 67.8 | 67.7 | 70.0 | 64.8 | 60.8 | 53.4 | 39.2 | 159.7 |
| 4000 | 38.4 | 47.6 | 54.9 | 59.7 | 61.8 | 62.0 | 61.5 | 61.4 | 62.4 | 58.1 | 51.8 | 39.8 | 19.0 | 159.1 |
| 5000 | 23.9 | 35.2 | 43.6 | 49.0 | 54.8 | 55.8 | 51.4 | 50.8 | 50.6 | 45.3 | 37.0 | 20.8 | 158.7 | |
| 6300 | 14.6 | 24.1 | 32.4 | 36.8 | 38.3 | 37.0 | 33.0 | 33.9 | 25.3 | 14.0 | | | 157.1 | |
| 8000 | | | | | | | | | | | | | 156.6 | |
| 10000 | | | | | | | | | | | | | 157.3 | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GASPL 81.6 85.2 86.6 87.6 90.6 91.2 92.3 94.4 99.1 100.6 101.1 100.5 94.8 178.4
 PNL 86.1 90.7 93.1 95.2 98.2 99.2 99.3 100.7 104.4 104.7 104.2 102.3 95.5
 PNL 86.6 90.7 93.1 95.7 99.4 100.5 99.3 100.7 104.4 104.7 104.2 102.3 95.6

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-20-78 TAPE NO. N294 IALPHA SB59 TAMB 30.20
 LOCATION C41 ANECH CH AERO. RDG. ADH070 PAMB 29.2970 RELHUM 19.73

MODEL TEST POINT 7101 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)
 SIZE

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X71020
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 79.0 | 81.0 | 81.3 | 83.3 | 83.9 | 85.8 | 87.2 | 89.7 | 95.0 | 99.6 | 104.0 | 107.5 | 108.9 | 140.6 |
| 315 | 80.1 | 81.6 | 82.9 | 83.0 | 84.6 | 87.0 | 87.8 | 89.8 | 96.4 | 101.5 | 106.4 | 108.6 | 108.6 | 141.5 |
| 400 | 82.0 | 82.5 | 84.0 | 83.6 | 85.2 | 88.1 | 88.4 | 90.6 | 97.7 | 105.0 | 108.2 | 108.6 | 103.2 | 142.8 |
| 500 | 82.4 | 83.1 | 84.4 | 84.7 | 87.8 | 88.4 | 89.6 | 92.0 | 98.7 | 106.1 | 109.0 | 108.4 | 100.1 | 143.1 |
| 630 | 82.5 | 84.3 | 85.8 | 85.6 | 86.5 | 89.5 | 90.4 | 94.1 | 100.9 | 106.5 | 108.8 | 106.0 | 95.7 | 142.9 |
| 800 | 85.0 | 84.6 | 86.8 | 87.4 | 88.2 | 91.3 | 92.0 | 95.7 | 102.4 | 107.0 | 107.6 | 103.3 | 93.7 | 142.4 |
| 1000 | 85.9 | 84.9 | 88.0 | 87.2 | 88.8 | 92.0 | 93.1 | 96.3 | 104.0 | 107.1 | 106.2 | 99.4 | 91.3 | 142.1 |
| 1250 | 85.3 | 87.1 | 89.1 | 89.4 | 90.0 | 93.3 | 94.0 | 97.9 | 104.3 | 107.2 | 106.1 | 97.7 | 90.4 | 142.3 |
| 1600 | 86.9 | 86.2 | 88.0 | 88.3 | 90.4 | 94.0 | 94.6 | 98.6 | 104.9 | 106.9 | 105.3 | 96.3 | 89.5 | 142.2 |
| 2000 | 86.3 | 87.1 | 88.6 | 89.1 | 90.2 | 93.3 | 94.7 | 99.2 | 105.5 | 107.7 | 104.7 | 95.4 | 89.4 | 142.6 |
| 2500 | 86.5 | 87.3 | 89.1 | 89.8 | 90.9 | 93.8 | 95.9 | 99.6 | 105.7 | 107.2 | 104.9 | 97.1 | 89.6 | 142.6 |
| 3150 | 87.3 | 88.6 | 88.9 | 90.1 | 91.7 | 94.3 | 96.2 | 100.4 | 106.3 | 106.5 | 104.4 | 96.9 | 89.4 | 142.7 |
| 4000 | 90.9 | 89.8 | 90.0 | 89.8 | 91.3 | 94.2 | 95.8 | 100.0 | 105.2 | 106.0 | 103.8 | 96.7 | 89.5 | 142.1 |
| 5000 | 95.1 | 94.5 | 93.0 | 91.4 | 92.3 | 94.6 | 96.0 | 100.5 | 105.1 | 105.9 | 103.5 | 97.1 | 90.4 | 142.5 |
| 6300 | 94.7 | 95.6 | 96.8 | 95.3 | 93.8 | 95.9 | 96.1 | 100.3 | 105.0 | 105.5 | 103.2 | 97.3 | 91.2 | 142.8 |
| 8000 | 92.6 | 94.3 | 95.6 | 96.5 | 96.8 | 96.2 | 96.0 | 99.6 | 104.3 | 104.7 | 102.2 | 96.8 | 90.6 | 142.6 |
| 10000 | 90.5 | 92.4 | 94.6 | 94.7 | 96.8 | 97.9 | 96.0 | 99.1 | 103.5 | 104.0 | 101.4 | 96.9 | 90.3 | 142.6 |
| 12500 | 88.6 | 90.5 | 91.7 | 92.8 | 94.8 | 96.9 | 96.1 | 98.0 | 100.9 | 101.8 | 98.9 | 95.2 | 89.9 | 141.5 |
| 16000 | 87.6 | 89.7 | 91.5 | 92.1 | 94.0 | 95.7 | 94.2 | 97.1 | 99.3 | 100.3 | 97.1 | 93.9 | 89.1 | 141.5 |
| 20000 | 83.4 | 87.3 | 88.8 | 90.4 | 93.7 | 94.5 | 91.9 | 94.7 | 96.4 | 96.9 | 93.8 | 91.3 | 87.3 | 140.8 |
| 25000 | 82.5 | 83.9 | 86.1 | 86.9 | 90.8 | 92.2 | 89.5 | 90.7 | 94.1 | 92.7 | 89.8 | 87.7 | 85.8 | 140.1 |
| 31500 | 80.5 | 80.6 | 84.1 | 85.7 | 85.8 | 86.8 | 85.9 | 87.5 | 90.7 | 90.5 | 88.0 | 83.2 | 80.0 | 139.9 |
| 40000 | 75.5 | 75.8 | 79.3 | 80.5 | 84.2 | 84.5 | 80.5 | 82.6 | 85.3 | 84.3 | 82.2 | 78.3 | 75.9 | 139.3 |
| 50000 | 68.6 | 68.9 | 71.9 | 74.6 | 77.0 | 77.8 | 76.0 | 74.9 | 81.0 | 76.7 | 75.5 | 72.7 | 69.6 | 137.5 |
| 63000 | 62.7 | 62.7 | 66.1 | 68.2 | 70.0 | 70.5 | 71.7 | 69.9 | 76.7 | 69.8 | 68.4 | 66.4 | 63.5 | 137.2 |
| 80000 | 56.7 | 55.6 | 59.8 | 62.0 | 63.4 | 63.8 | 62.8 | 63.1 | 69.2 | 63.3 | 62.9 | 58.1 | 55.4 | 136.9 |
| GASPL | 102.0 | 102.8 | 104.0 | 104.1 | 105.8 | 107.1 | 107.3 | 110.9 | 116.3 | 118.5 | 118.2 | 116.1 | 111.3 | 155.8 |

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| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | SB59 | TAMB | 26.60 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH966 | PAMB | 29.5700 | RELHUM | 46.00 |

| MODEL | TEST POINT | ACQUSTIC RANGE | 12.2 M (40.0 FT) ARC | 154.7 SQ CM (23.99 SQ IN) - MODEL | 117.96 M/SEC (387.0 FPS) |
|-------|------------|----------------|-----------------------|------------------------------------|---------------------------|
| 7100 | 7102 | | | | |

FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X71020

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 86.7 | 87.2 | 88.0 | 88.4 | 88.4 | 88.8 | 88.4 | 88.2 | 88.0 | 87.2 | 100.6 | 104.5 | 102.9 | 137.6 |
| 315 | 86.7 | 87.2 | 88.0 | 88.4 | 88.3 | 87.2 | 86.3 | 87.1 | 86.9 | 102.7 | 105.7 | 107.4 | 104.3 | 141.1 |
| 400 | 87.5 | 87.8 | 88.7 | 88.3 | 86.9 | 88.3 | 87.7 | 88.9 | 86.7 | 103.6 | 106.6 | 107.6 | 102.8 | 141.5 |
| 500 | 88.3 | 88.6 | 88.7 | 88.9 | 89.7 | 88.7 | 88.6 | 90.0 | 98.7 | 103.9 | 106.4 | 108.7 | 100.1 | 141.0 |
| 630 | 89.8 | 89.3 | 89.2 | 88.0 | 88.9 | 89.9 | 89.4 | 91.9 | 100.6 | 104.8 | 105.8 | 104.1 | 100.6 | 141.4 |
| 800 | 92.6 | 92.7 | 92.3 | 90.1 | 90.2 | 91.8 | 91.0 | 93.4 | 102.4 | 105.1 | 104.7 | 101.0 | 100.0 | 141.0 |
| 1000 | 92.4 | 90.6 | 91.7 | 90.8 | 90.9 | 92.6 | 92.2 | 94.1 | 102.8 | 105.3 | 104.5 | 99.1 | 98.6 | 141.0 |
| 1250 | 93.3 | 91.2 | 92.9 | 90.8 | 92.2 | 94.1 | 93.2 | 95.6 | 103.7 | 105.2 | 104.1 | 98.0 | 98.0 | 141.2 |
| 1600 | 92.7 | 93.3 | 94.1 | 93.0 | 92.7 | 95.0 | 94.1 | 97.0 | 104.6 | 106.4 | 103.7 | 98.4 | 98.7 | 142.0 |
| 2000 | 94.3 | 92.5 | 93.1 | 92.5 | 92.8 | 94.5 | 94.5 | 97.6 | 105.2 | 106.2 | 104.3 | 99.5 | 98.8 | 142.2 |
| 2500 | 93.7 | 93.4 | 93.8 | 93.0 | 93.7 | 95.3 | 96.0 | 98.6 | 106.2 | 108.1 | 104.4 | 98.8 | 99.2 | 142.7 |
| 3150 | 93.9 | 93.7 | 94.3 | 93.8 | 94.8 | 96.2 | 96.7 | 99.6 | 105.7 | 106.2 | 104.4 | 100.2 | 99.7 | 142.9 |
| 4000 | 94.6 | 95.0 | 94.2 | 94.3 | 94.8 | 96.8 | 96.9 | 99.8 | 105.9 | 106.2 | 104.1 | 100.7 | 100.6 | 143.1 |
| 5000 | 97.8 | 96.0 | 95.4 | 94.1 | 95.7 | 97.6 | 97.5 | 100.5 | 105.9 | 105.0 | 104.2 | 101.2 | 102.2 | 143.6 |
| 6300 | 100.3 | 99.2 | 97.2 | 95.1 | 97.4 | 98.9 | 97.6 | 100.4 | 105.5 | 105.5 | 103.5 | 101.3 | 102.2 | 143.9 |
| 8000 | 99.5 | 100.3 | 101.2 | 99.1 | 100.8 | 99.2 | 97.7 | 99.8 | 105.2 | 105.3 | 103.2 | 102.0 | 102.7 | 144.8 |
| 10000 | 99.4 | 100.4 | 101.0 | 100.9 | 100.9 | 100.7 | 100.9 | 98.0 | 99.6 | 103.7 | 104.3 | 102.0 | 101.6 | 145.1 |
| 12500 | 97.1 | 98.3 | 99.7 | 98.5 | 99.3 | 99.9 | 98.4 | 99.2 | 102.8 | 103.7 | 101.1 | 101.1 | 103.4 | 144.9 |
| 16000 | 97.3 | 98.1 | 97.9 | 97.5 | 98.0 | 98.7 | 96.5 | 98.4 | 100.9 | 101.3 | 96.5 | 98.9 | 101.6 | 144.7 |
| 20000 | 93.3 | 94.7 | 95.7 | 95.3 | 96.2 | 97.5 | 94.4 | 96.6 | 97.1 | 95.3 | 92.6 | 93.4 | 98.2 | 143.6 |
| 25000 | 91.1 | 93.8 | 94.0 | 94.1 | 95.3 | 95.2 | 91.0 | 90.8 | 96.2 | 95.9 | 94.1 | 92.5 | 96.3 | 144.2 |
| 31500 | 89.4 | 89.6 | 90.5 | 89.9 | 89.7 | 89.8 | 88.3 | 89.0 | 92.0 | 90.6 | 88.7 | 87.4 | 91.6 | 143.0 |
| 40000 | 83.9 | 83.4 | 86.0 | 86.7 | 88.8 | 87.5 | 82.8 | 84.2 | 88.3 | 83.8 | 82.8 | 82.7 | 86.2 | 143.0 |
| 50000 | 81.2 | 80.4 | 82.5 | 82.2 | 81.6 | 80.8 | 78.4 | 76.8 | 85.2 | 78.1 | 77.3 | 78.3 | 82.1 | 142.5 |
| 63000 | 73.3 | 72.5 | 74.1 | 75.3 | 74.6 | 73.5 | 74.2 | 71.8 | 78.8 | 72.8 | 73.1 | 71.5 | 76.0 | 141.3 |
| 80000 | 66.0 | 64.8 | 66.8 | 67.5 | 67.9 | 66.8 | 65.0 | 64.8 | 69.0 | 63.0 | 63.3 | 61.7 | 66.2 | 139.9 |
| GASPL | 108.5 | 108.6 | 108.9 | 108.0 | 109.3 | 109.5 | 108.2 | 110.5 | 116.5 | 117.7 | 117.0 | 115.6 | 114.5 | 156.9 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | FREE JET DIAMETER (IN) | REFRACTION CORRECTION - YES | TURBULANCE CORRECTION - YES |
|------------------------------|----------------------------|------------------------|-----------------------------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | 387.00 | 48.00 | | |

| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | 9859 | TAMB | 28.60 | |
|-----------|--------------|----------|------|--------|------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERG. | RDO. | ADH986 | PAMB | 29.5700 | RELHUM | 46.00 |

| MODEL | TEST POINT | ACQUSTIC RANGE | FREE-JET SPEED |
|-------|------------|-----------------------|---------------------------|
| 7100 | 7102 | 12.2 M (40.0 FT) ARC | 117.96 M/SEC (397.0 FPS) |

07/17/79 10.180

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X71021

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 65.7 | 67.5 | 68.5 | 67.6 | 68.9 | 70.4 | 69.6 | 70.5 | 77.5 | 83.4 | 84.9 | 83.6 | 75.5 | 159.2 |
| 63 | 67.5 | 68.3 | 69.5 | 68.4 | 71.6 | 70.6 | 70.5 | 71.5 | 79.5 | 83.6 | 84.6 | 81.7 | 72.7 | 158.7 |
| 80 | 67.9 | 69.0 | 70.0 | 69.5 | 80.8 | 72.0 | 71.3 | 73.4 | 81.4 | 84.5 | 83.9 | 80.1 | 73.2 | 159.1 |
| 100 | 70.6 | 72.3 | 73.0 | 71.5 | 72.0 | 73.8 | 72.9 | 74.9 | 83.2 | 84.8 | 82.7 | 76.8 | 72.3 | 158.6 |
| 125 | 70.4 | 70.3 | 72.4 | 72.2 | 72.7 | 74.5 | 74.0 | 75.4 | 83.4 | 84.8 | 82.5 | 74.8 | 70.7 | 158.6 |
| 160 | 71.1 | 70.5 | 73.4 | 72.0 | 73.8 | 75.9 | 74.9 | 77.1 | 84.2 | 84.6 | 81.8 | 73.4 | 69.6 | 158.8 |
| 200 | 70.2 | 72.5 | 74.4 | 74.0 | 74.2 | 76.6 | 75.6 | 78.0 | 84.9 | 85.6 | 81.2 | 73.5 | 70.0 | 159.6 |
| 250 | 71.5 | 71.4 | 73.1 | 73.3 | 74.1 | 76.0 | 75.8 | 78.4 | 85.2 | 85.1 | 81.5 | 74.1 | 69.4 | 159.9 |
| 315 | 70.5 | 72.0 | 73.5 | 73.6 | 74.7 | 76.5 | 77.0 | 79.2 | 86.0 | 84.6 | 81.2 | 73.9 | 69.0 | 160.4 |
| 400 | 70.1 | 71.8 | 73.7 | 74.1 | 75.5 | 77.1 | 77.4 | 79.8 | 85.2 | 84.3 | 80.7 | 73.7 | 68.5 | 160.5 |
| 500 | 70.4 | 72.8 | 73.3 | 74.3 | 75.2 | 77.2 | 77.3 | 79.7 | 85.0 | 84.0 | 79.9 | 73.5 | 68.5 | 160.8 |
| 630 | 73.1 | 73.4 | 74.2 | 73.8 | 75.9 | 78.0 | 77.7 | 80.2 | 84.7 | 83.4 | 79.4 | 73.4 | 69.0 | 161.2 |
| 800 | 75.1 | 76.2 | 75.6 | 74.5 | 77.3 | 79.0 | 77.5 | 79.6 | 84.0 | 82.5 | 78.3 | 72.7 | 67.9 | 161.6 |
| 1000 | 73.9 | 76.9 | 79.4 | 78.3 | 80.6 | 79.1 | 77.5 | 79.1 | 83.4 | 82.0 | 77.6 | 72.8 | 67.2 | 162.4 |
| 1250 | 73.3 | 76.8 | 79.0 | 80.0 | 80.4 | 80.7 | 77.6 | 78.7 | 81.7 | 80.6 | 75.9 | 71.6 | 66.6 | 162.7 |
| 1600 | 70.1 | 74.1 | 77.2 | 77.5 | 78.7 | 79.5 | 77.8 | 77.9 | 80.4 | 79.4 | 74.1 | 69.7 | 64.1 | 162.6 |
| 2000 | 69.4 | 73.2 | 75.1 | 76.0 | 77.2 | 78.2 | 78.7 | 76.9 | 78.1 | 76.4 | 70.5 | 65.9 | 59.3 | 162.3 |
| 2500 | 63.5 | 68.6 | 72.0 | 73.1 | 76.8 | 76.4 | 73.0 | 74.4 | 73.4 | 69.2 | 62.8 | 57.6 | 51.0 | 161.2 |
| 3150 | 58.0 | 65.3 | 68.4 | 70.4 | 72.6 | 72.8 | 68.2 | 67.1 | 70.7 | 67.4 | 60.9 | 51.7 | 40.7 | 161.8 |
| 4000 | 50.0 | 56.4 | 61.2 | 62.8 | 64.0 | 64.5 | 62.6 | 62.0 | 62.6 | 57.3 | 49.3 | 37.6 | 21.5 | 160.6 |
| 5000 | 34.8 | 42.6 | 50.4 | 54.3 | 58.1 | 57.3 | 52.1 | 51.7 | 52.7 | 43.0 | 33.6 | 19.3 | | 160.6 |
| 6300 | 14.3 | 25.4 | 34.8 | 39.0 | 40.8 | 40.8 | 37.6 | 33.6 | 37.5 | 23.1 | 10.4 | | | 160.2 |
| 8000 | | | 5.1 | 12.9 | 15.7 | 15.7 | 15.3 | 9.3 | 9.7 | | | | | 158.9 |
| 10000 | | | | | | | | | | | | | | 167.5 |

ORIGINAL PAGE IS
OF POOR QUALITY

GASPL 83.6 85.6 87.3 87.3 89.4 89.7 88.4 90.3 95.8 95.9 93.6 88.9 82.6 174.4
 PNL 90.8 94.0 96.1 96.7 98.9 99.2 97.2 98.5 102.0 101.2 97.2 91.3 85.4
 PNL 90.8 94.0 96.9 97.3 100.2 100.2 97.2 98.5 102.7 101.2 98.2 91.3 85.4

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 26.80
 LOCATION C41 ANECH CH AERO. RDG. ADH98C PAMB 29.5700 RELHUM 46.00

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
 7100 7102 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.96 M/SEC (387.0 FPS)

07/19/79 10.602

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F. 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARCIDENTIFICATION - MODEL FJ-ZER-FMODL X71030
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 84.5 | 90.3 | 88.3 | 89.1 | 90.0 | 92.1 | 95.0 | 95.9 | 100.1 | 105.4 | 110.0 | 113.5 | 113.1 | 146.6 |
| 315 | 85.9 | 88.9 | 89.0 | 91.8 | 93.4 | 94.8 | 96.5 | 96.5 | 102.7 | 107.5 | 111.6 | 114.8 | 113.5 | 147.9 |
| 400 | 87.7 | 90.0 | 90.5 | 89.5 | 91.4 | 93.2 | 94.9 | 97.0 | 104.2 | 111.3 | 114.9 | 116.1 | 113.8 | 149.9 |
| 500 | 88.5 | 90.8 | 91.8 | 91.6 | 93.2 | 95.1 | 96.2 | 97.9 | 105.1 | 112.9 | 116.3 | 117.2 | 114.4 | 151.1 |
| 630 | 89.6 | 92.4 | 92.4 | 93.0 | 93.3 | 96.2 | 97.3 | 100.0 | 106.9 | 113.5 | 117.4 | 117.8 | 116.0 | 152.1 |
| 800 | 93.9 | 93.0 | 94.0 | 94.5 | 95.4 | 97.5 | 99.1 | 101.3 | 108.5 | 114.3 | 118.2 | 118.6 | 116.0 | 152.9 |
| 1000 | 97.8 | 99.3 | 98.6 | 97.6 | 97.5 | 98.6 | 100.5 | 102.6 | 109.8 | 113.4 | 117.8 | 118.7 | 115.9 | 152.8 |
| 1250 | 94.4 | 98.2 | 98.5 | 99.0 | 100.3 | 101.2 | 101.9 | 103.8 | 109.4 | 112.8 | 118.4 | 118.8 | 114.7 | 152.9 |
| 1600 | 96.7 | 95.6 | 96.6 | 96.9 | 98.0 | 100.4 | 101.5 | 104.2 | 110.0 | 112.2 | 118.1 | 114.1 | 114.1 | 152.5 |
| 2000 | 97.7 | 98.7 | 98.5 | 97.2 | 97.3 | 99.4 | 100.8 | 104.5 | 110.4 | 112.6 | 117.3 | 116.0 | 111.5 | 151.6 |
| 2500 | 96.3 | 96.8 | 97.6 | 97.9 | 98.7 | 99.6 | 102.0 | 104.9 | 110.3 | 112.7 | 116.7 | 114.1 | 109.8 | 151.0 |
| 3150 | 97.5 | 98.6 | 97.4 | 97.6 | 97.7 | 100.0 | 101.4 | 104.6 | 110.3 | 111.7 | 115.5 | 112.6 | 108.3 | 150.1 |
| 4000 | 96.0 | 97.1 | 97.1 | 96.6 | 97.2 | 99.3 | 101.4 | 104.4 | 109.3 | 111.0 | 113.4 | 110.8 | 106.6 | 148.8 |
| 5000 | 95.3 | 96.2 | 96.4 | 96.9 | 97.7 | 99.9 | 101.0 | 104.4 | 109.1 | 110.8 | 112.2 | 109.6 | 105.4 | 148.4 |
| 6300 | 94.0 | 96.1 | 96.9 | 96.6 | 97.6 | 100.2 | 100.7 | 103.6 | 107.8 | 110.2 | 110.5 | 108.1 | 105.3 | 147.6 |
| 8000 | 92.9 | 95.7 | 96.1 | 96.4 | 97.8 | 99.4 | 100.2 | 102.5 | 107.0 | 108.9 | 106.6 | 103.6 | 103.6 | 146.5 |
| 10000 | 90.5 | 94.5 | 95.4 | 95.8 | 98.2 | 99.8 | 99.5 | 102.0 | 105.6 | 106.8 | 107.5 | 105.4 | 102.5 | 146.0 |
| 12500 | 88.5 | 93.0 | 93.7 | 94.8 | 97.4 | 98.3 | 98.8 | 100.6 | 103.2 | 104.7 | 104.9 | 103.5 | 100.8 | 144.9 |
| 16000 | 87.0 | 92.2 | 93.2 | 94.3 | 96.6 | 97.8 | 96.7 | 99.1 | 101.2 | 102.7 | 102.6 | 101.7 | 99.2 | 144.6 |
| 20000 | 82.2 | 89.7 | 90.7 | 92.4 | 95.2 | 96.5 | 93.7 | 96.0 | 98.3 | 98.5 | 99.5 | 98.6 | 96.3 | 143.4 |
| 25000 | 81.0 | 85.8 | 88.0 | 89.2 | 93.1 | 93.4 | 91.2 | 90.7 | 95.3 | 94.1 | 95.7 | 94.5 | 94.3 | 142.4 |
| 31500 | 79.5 | 82.3 | 85.8 | 88.0 | 88.8 | 88.0 | 87.0 | 87.7 | 91.1 | 92.6 | 92.5 | 89.8 | 89.1 | 142.0 |
| 40000 | 74.5 | 77.2 | 80.5 | 82.7 | 86.8 | 86.5 | 82.3 | 82.8 | 86.2 | 87.1 | 87.4 | 84.3 | 84.7 | 141.7 |
| 50000 | 67.4 | 70.4 | 72.6 | 76.1 | 78.3 | 79.3 | 78.0 | 75.9 | 81.9 | 81.3 | 81.9 | 80.0 | 78.4 | 140.0 |
| 63000 | 62.3 | 63.9 | 65.8 | 69.7 | 70.1 | 70.5 | 71.8 | 69.9 | 77.4 | 74.3 | 75.7 | 74.7 | 73.8 | 139.2 |
| 80000 | 56.8 | 57.8 | 61.0 | 64.8 | 64.3 | 65.2 | 64.4 | 63.6 | 71.4 | 68.2 | 71.9 | 67.5 | 66.4 | 140.2 |
| GASPL | 106.9 | 108.5 | 108.7 | 108.8 | 110.2 | 111.7 | 112.6 | 115.3 | 120.7 | 124.0 | 127.9 | 127.9 | 125.0 | 163.2 |

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OF POOR QUALITYTEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAMB 30.20
LOCATION C41 ANECH CH AERO. RDG. ADH071 PAMB 29.2970 RELHUM 19.73

MODEL TEST POINT 7103 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

547

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X71030

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 84.5 | 90.3 | 88.3 | 89.1 | 90.0 | 92.1 | 95.0 | 95.9 | 100.1 | 105.4 | 110.0 | 113.5 | 113.1 | 146.8 |
| 315 | 85.9 | 88.9 | 88.9 | 90.0 | 91.8 | 93.4 | 94.8 | 96.5 | 102.7 | 107.5 | 111.6 | 114.8 | 113.5 | 147.9 |
| 400 | 87.7 | 90.0 | 90.5 | 89.5 | 91.4 | 93.2 | 94.9 | 97.0 | 104.2 | 111.3 | 114.9 | 116.1 | 113.8 | 149.9 |
| 500 | 88.5 | 90.8 | 91.8 | 91.6 | 93.2 | 95.1 | 96.2 | 97.9 | 105.1 | 112.9 | 116.3 | 117.2 | 114.4 | 151.1 |
| 630 | 89.6 | 92.4 | 92.4 | 93.0 | 99.3 | 96.2 | 97.3 | 100.0 | 106.9 | 113.5 | 117.4 | 117.8 | 116.0 | 152.1 |
| 800 | 93.9 | 93.0 | 94.0 | 94.5 | 95.4 | 97.5 | 98.1 | 101.3 | 108.5 | 114.3 | 118.2 | 118.6 | 116.0 | 152.9 |
| 1000 | 97.8 | 99.3 | 98.6 | 97.6 | 97.5 | 98.6 | 100.5 | 102.6 | 109.8 | 113.4 | 117.8 | 118.7 | 115.9 | 152.8 |
| 1250 | 94.4 | 98.2 | 98.5 | 99.0 | 100.3 | 101.2 | 101.8 | 103.8 | 109.4 | 112.8 | 118.4 | 118.8 | 114.7 | 152.9 |
| 1600 | 96.7 | 95.6 | 96.6 | 96.9 | 98.0 | 100.4 | 101.5 | 104.2 | 110.0 | 112.2 | 118.2 | 118.1 | 114.1 | 152.5 |
| 2000 | 97.7 | 98.7 | 98.5 | 97.2 | 97.3 | 99.4 | 100.8 | 104.5 | 110.4 | 112.6 | 117.3 | 116.0 | 111.5 | 151.6 |
| 2500 | 96.3 | 96.8 | 97.6 | 97.9 | 98.7 | 99.8 | 102.0 | 104.9 | 110.3 | 112.7 | 116.7 | 114.1 | 109.8 | 151.0 |
| 3150 | 97.5 | 98.6 | 97.4 | 97.6 | 97.7 | 100.0 | 101.4 | 104.6 | 110.3 | 111.7 | 115.6 | 112.6 | 108.3 | 150.1 |
| 4000 | 96.0 | 97.1 | 97.1 | 96.6 | 97.2 | 99.3 | 101.4 | 104.4 | 109.3 | 111.0 | 113.4 | 110.8 | 106.6 | 148.8 |
| 5000 | 95.3 | 96.2 | 96.4 | 96.9 | 97.7 | 99.9 | 101.0 | 104.4 | 109.1 | 110.8 | 112.2 | 109.6 | 105.4 | 148.4 |
| 6300 | 94.0 | 96.1 | 96.9 | 96.6 | 97.6 | 100.2 | 100.7 | 103.6 | 107.8 | 110.2 | 110.6 | 108.1 | 105.3 | 147.6 |
| 8000 | 92.9 | 95.7 | 96.1 | 96.4 | 97.8 | 99.4 | 100.2 | 102.5 | 107.0 | 107.8 | 108.9 | 106.6 | 103.6 | 146.5 |
| 10000 | 90.5 | 94.5 | 95.4 | 95.8 | 98.2 | 99.8 | 99.5 | 102.0 | 105.6 | 106.8 | 107.5 | 105.4 | 102.5 | 146.0 |
| 12500 | 88.5 | 93.0 | 93.7 | 94.8 | 97.4 | 98.3 | 98.8 | 100.6 | 103.2 | 104.7 | 104.9 | 103.5 | 100.8 | 144.9 |
| 16000 | 87.0 | 92.2 | 93.2 | 94.3 | 96.6 | 97.8 | 96.7 | 99.1 | 101.2 | 102.7 | 102.6 | 101.7 | 99.2 | 144.6 |
| 20000 | 82.2 | 89.7 | 90.7 | 92.4 | 95.2 | 96.5 | 93.7 | 96.0 | 98.3 | 98.5 | 99.5 | 96.6 | 96.3 | 143.4 |
| 25000 | 81.0 | 85.8 | 88.0 | 89.2 | 93.1 | 93.4 | 91.2 | 90.7 | 95.3 | 94.1 | 95.7 | 94.5 | 94.3 | 142.4 |
| 31500 | 79.5 | 82.3 | 85.8 | 88.0 | 88.8 | 88.0 | 87.0 | 87.7 | 91.1 | 92.6 | 92.5 | 89.8 | 89.1 | 142.0 |
| 40000 | 74.5 | 77.2 | 80.5 | 82.7 | 86.8 | 86.5 | 82.3 | 82.8 | 86.2 | 87.1 | 87.4 | 84.3 | 84.7 | 141.7 |
| 50000 | 67.4 | 70.4 | 72.6 | 76.1 | 78.3 | 79.3 | 78.0 | 75.9 | 81.9 | 81.3 | 81.9 | 80.0 | 78.4 | 140.0 |
| 63000 | 62.3 | 63.9 | 66.8 | 69.7 | 70.1 | 70.5 | 71.8 | 69.9 | 77.4 | 74.3 | 75.7 | 74.7 | 73.8 | 139.2 |
| 80000 | 56.8 | 57.8 | 61.0 | 64.8 | 64.3 | 65.2 | 64.4 | 63.6 | 71.4 | 68.2 | 71.9 | 67.5 | 66.4 | 140.2 |
| GASPL | 106.9 | 108.5 | 108.7 | 108.8 | 110.2 | 111.7 | 112.6 | 115.3 | 120.7 | 124.0 | 127.9 | 127.9 | 125.0 | 163.2 |

MODEL/ENGINE SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 0 REFRACTION CORRECTION - YES
 INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 49.00 TURBULANCE CORRECTION - YES

TEST DATE 02-20-78 TAPE NO. N294 IALPHA SB59 TAMB 30.20
 LOCATION C41 ANECH CH AERO. RDG. ADH071 PAMB 29.2970 RELHUM 19.73

MODEL TEST POINT ACOUSTIC RANGE SIZE FREE-JET SPEED
 7100 7103 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. M/SEC (0. FPS)

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07/19/79 18.682

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X71031

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 65.9 | 69.7 | 71.3 | 71.1 | 73.3 | 75.3 | 76.8 | 78.8 | 85.1 | 91.1 | 93.1 | 92.1 | 86.5 | 167.6 |
| 63 | 66.7 | 70.5 | 72.6 | 73.1 | 75.1 | 77.1 | 78.1 | 79.4 | 85.9 | 92.6 | 94.5 | 93.2 | 87.0 | 168.8 |
| 80 | 67.8 | 72.1 | 73.2 | 74.5 | 81.2 | 78.2 | 79.2 | 81.5 | 87.7 | 93.2 | 95.5 | 93.7 | 88.5 | 169.8 |
| 100 | 72.0 | 72.6 | 74.7 | 76.0 | 77.2 | 79.5 | 81.0 | 82.7 | 89.2 | 93.9 | 96.2 | 94.4 | 88.4 | 170.5 |
| 125 | 75.7 | 78.9 | 79.2 | 79.0 | 79.2 | 80.5 | 82.2 | 84.0 | 90.5 | 93.0 | 95.7 | 94.4 | 88.0 | 170.5 |
| 160 | 72.1 | 77.6 | 79.0 | 80.2 | 82.0 | 83.0 | 83.5 | 85.0 | 89.9 | 92.2 | 96.2 | 94.2 | 86.5 | 170.6 |
| 200 | 74.3 | 74.8 | 77.0 | 78.0 | 79.5 | 82.0 | 83.0 | 85.2 | 90.4 | 91.4 | 95.7 | 93.2 | 85.4 | 170.2 |
| 250 | 74.9 | 77.6 | 78.6 | 78.1 | 78.6 | 80.9 | 82.1 | 85.3 | 90.5 | 91.5 | 94.5 | 90.6 | 82.1 | 169.2 |
| 315 | 73.1 | 75.4 | 77.4 | 78.5 | 79.7 | 81.0 | 83.0 | 85.5 | 90.0 | 91.3 | 93.4 | 88.2 | 79.7 | 168.6 |
| 400 | 73.8 | 76.7 | 76.8 | 77.9 | 78.4 | 80.9 | 82.2 | 84.9 | 89.7 | 89.9 | 91.9 | 86.0 | 77.2 | 167.8 |
| 500 | 71.8 | 74.9 | 76.2 | 76.6 | 77.7 | 79.9 | 81.9 | 84.3 | 88.4 | 88.8 | 89.2 | 83.6 | 74.4 | 166.5 |
| 630 | 70.6 | 73.5 | 75.2 | 76.6 | 77.9 | 80.2 | 81.2 | 84.1 | 87.8 | 88.2 | 87.5 | 81.8 | 72.2 | 166.0 |
| 800 | 68.8 | 73.1 | 75.3 | 76.0 | 77.6 | 80.4 | 80.6 | 83.0 | 86.2 | 87.2 | 85.4 | 79.6 | 71.0 | 165.2 |
| 1000 | 67.2 | 72.4 | 74.3 | 75.7 | 77.6 | 79.4 | 80.0 | 81.8 | 85.2 | 84.5 | 83.3 | 77.4 | 68.2 | 164.2 |
| 1250 | 64.3 | 70.8 | 73.4 | 74.9 | 77.8 | 79.7 | 79.1 | 81.1 | 83.6 | 83.1 | 81.4 | 75.3 | 65.6 | 163.7 |
| 1600 | 61.5 | 68.8 | 71.3 | 73.6 | 76.8 | 77.9 | 78.1 | 79.3 | 80.8 | 80.4 | 77.9 | 72.1 | 61.5 | 162.6 |
| 2000 | 59.0 | 67.3 | 70.4 | 72.8 | 75.8 | 77.3 | 76.0 | 77.8 | 78.4 | 77.8 | 74.6 | 68.6 | 56.9 | 162.2 |
| 2500 | 52.4 | 63.7 | 67.1 | 70.2 | 73.8 | 75.5 | 72.3 | 73.8 | 74.5 | 72.4 | 69.7 | 62.7 | 49.1 | 161.1 |
| 3150 | 47.9 | 57.3 | 62.5 | 65.4 | 70.3 | 71.1 | 68.5 | 67.0 | 69.7 | 65.6 | 62.6 | 53.6 | 38.7 | 160.1 |
| 4000 | 40.2 | 49.1 | 56.4 | 60.9 | 63.1 | 62.8 | 61.3 | 60.7 | 61.7 | 59.3 | 53.1 | 40.0 | 19.0 | 159.6 |
| 5000 | 25.4 | 36.5 | 44.9 | 50.3 | 56.1 | 56.3 | 51.6 | 50.3 | 50.6 | 46.3 | 38.2 | 20.8 | | 159.3 |
| 6300 | 0.4 | 15.3 | 24.9 | 32.9 | 37.5 | 39.3 | 37.2 | 32.7 | 34.2 | 26.3 | 15.0 | | | 157.7 |
| 8000 | | | | 7.2 | 11.2 | 12.7 | 12.9 | 7.4 | 8.4 | | | | | 156.8 |
| 10000 | | | | | | | | | | | | | | 157.9 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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CASPL 83.6 86.8 88.2 89.0 90.9 92.4 93.3 95.5 100.4 102.8 105.2 102.8 96.2 180.6
PWL 87.8 92.0 94.1 95.9 98.4 100.0 99.7 101.4 105.4 106.3 107.6 104.0 96.9
PWL 89.0 92.6 94.1 95.9 99.7 101.2 100.2 101.4 105.2 106.3 107.6 104.0 97.0

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAMB 30.20
LOCATION C41 ANECH CH AERO. RDG. ADH071 PAMB 29.2970 RELHUM 19.73

MODEL TEST POINT 7103 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. FREE-JET SPEED M/SEC (O. FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X71040
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 80.4 | 83.2 | 82.9 | 84.3 | 85.2 | 87.1 | 89.6 | 92.0 | 95.5 | 101.1 | 106.0 | 109.7 | 109.1 | 142.7 |
| 315 | 81.7 | 82.9 | 84.0 | 84.1 | 85.9 | 88.6 | 89.2 | 91.6 | 98.4 | 103.0 | 108.1 | 110.6 | 108.5 | 143.7 |
| 400 | 83.8 | 83.8 | 85.3 | 84.9 | 86.2 | 88.8 | 89.7 | 91.9 | 99.2 | 107.3 | 111.4 | 112.1 | 107.0 | 145.7 |
| 500 | 84.4 | 84.9 | 86.3 | 86.7 | 88.9 | 90.2 | 91.6 | 93.5 | 100.8 | 108.9 | 112.5 | 112.2 | 103.8 | 146.4 |
| 630 | 85.3 | 85.8 | 87.6 | 87.6 | 89.5 | 91.8 | 92.7 | 96.1 | 103.1 | 109.5 | 113.8 | 111.0 | 100.4 | 147.0 |
| 800 | 87.3 | 85.6 | 89.1 | 89.9 | 89.7 | 92.6 | 93.8 | 97.7 | 104.7 | 110.2 | 113.9 | 109.5 | 98.5 | 147.1 |
| 1000 | 88.2 | 87.2 | 89.7 | 89.3 | 91.1 | 93.7 | 94.8 | 98.3 | 105.8 | 109.6 | 112.7 | 106.6 | 96.5 | 146.2 |
| 1250 | 86.8 | 89.3 | 91.4 | 90.6 | 92.2 | 94.8 | 95.7 | 99.7 | 105.8 | 109.2 | 112.6 | 105.0 | 95.7 | 146.0 |
| 1600 | 89.1 | 87.5 | 89.6 | 90.5 | 92.1 | 94.5 | 96.4 | 100.3 | 106.7 | 109.1 | 110.8 | 103.5 | 94.8 | 145.3 |
| 2000 | 89.3 | 89.4 | 90.5 | 90.1 | 91.0 | 94.3 | 96.5 | 100.7 | 107.0 | 109.0 | 109.2 | 103.1 | 94.1 | 144.9 |
| 2500 | 91.6 | 92.0 | 92.3 | 91.3 | 92.6 | 94.8 | 97.4 | 101.1 | 106.7 | 109.2 | 108.9 | 101.6 | 93.6 | 144.8 |
| 3150 | 92.1 | 92.9 | 93.4 | 93.6 | 93.5 | 95.8 | 97.5 | 101.7 | 107.8 | 108.5 | 108.7 | 102.6 | 93.6 | 145.1 |
| 4000 | 92.4 | 91.5 | 93.0 | 92.8 | 93.8 | 95.7 | 97.1 | 101.3 | 107.0 | 107.7 | 107.3 | 101.0 | 93.5 | 144.3 |
| 5000 | 90.9 | 91.0 | 92.0 | 93.0 | 93.5 | 96.4 | 98.0 | 101.5 | 106.4 | 108.2 | 107.0 | 100.4 | 93.1 | 144.4 |
| 6300 | 90.4 | 91.6 | 92.6 | 92.3 | 93.8 | 96.7 | 98.1 | 101.1 | 106.0 | 107.0 | 105.0 | 98.3 | 93.2 | 143.7 |
| 8000 | 90.9 | 91.3 | 92.2 | 92.3 | 93.3 | 96.4 | 97.2 | 100.1 | 105.3 | 105.5 | 103.7 | 97.4 | 91.4 | 143.1 |
| 10000 | 90.6 | 91.2 | 92.4 | 92.5 | 93.8 | 96.7 | 98.3 | 99.7 | 103.8 | 104.8 | 102.2 | 97.2 | 90.8 | 142.7 |
| 12500 | 89.7 | 90.3 | 90.8 | 91.6 | 93.6 | 95.2 | 94.8 | 98.3 | 101.8 | 102.1 | 99.7 | 95.7 | 90.2 | 141.6 |
| 16000 | 88.7 | 90.0 | 91.3 | 90.9 | 93.3 | 94.8 | 94.0 | 97.1 | 99.1 | 100.9 | 98.2 | 93.9 | 89.4 | 141.6 |
| 20000 | 85.2 | 89.1 | 89.4 | 90.7 | 92.5 | 93.6 | 91.7 | 94.2 | 96.4 | 97.3 | 93.9 | 91.6 | 87.6 | 140.7 |
| 25000 | 84.5 | 85.7 | 88.0 | 88.3 | 90.9 | 91.7 | 89.3 | 89.6 | 94.5 | 93.1 | 90.1 | 88.0 | 86.1 | 140.3 |
| 31500 | 82.6 | 82.0 | 86.2 | 86.8 | 86.6 | 87.3 | 85.8 | 86.5 | 90.0 | 90.3 | 87.8 | 83.6 | 80.4 | 140.1 |
| 40000 | 77.3 | 77.2 | 80.4 | 81.6 | 85.5 | 85.5 | 80.9 | 81.4 | 84.6 | 84.1 | 82.5 | 78.3 | 75.5 | 139.7 |
| 50000 | 70.4 | 70.0 | 72.2 | 75.4 | 77.1 | 78.3 | 76.3 | 75.0 | 80.8 | 76.8 | 75.8 | 72.8 | 70.2 | 137.7 |
| 63000 | 64.1 | 63.8 | 66.2 | 68.5 | 69.1 | 70.0 | 70.3 | 68.2 | 76.1 | 69.6 | 68.8 | 66.5 | 64.1 | 136.6 |
| 80000 | 58.3 | 57.1 | 60.6 | 63.1 | 63.0 | 64.4 | 62.4 | 61.9 | 68.0 | 62.5 | 62.5 | 67.7 | 55.6 | 136.6 |
| OASPL | 102.2 | 102.6 | 103.8 | 103.9 | 105.7 | 107.6 | 108.5 | 112.0 | 117.7 | 120.5 | 122.6 | 119.8 | 114.4 | 158.0 |

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TEST DATE 02-27-78 TAPE NO. N299 ALPHA 8859 TAMB 27.32
LOCATION C41 ANECH CH AERO. RDG. ADH987 PAMB 29.5700 RELHUM 46.20

MODEL TEST POINT 7104 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.65 M/SEC (388.0 FPS) FREE-JET SPEED

07/17/78 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMOOL X71040

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 67.7 | 69.2 | 67.6 | 67.4 | 66.7 | 67.1 | 67.7 | 68.5 | 69.0 | 69.7 | 103.4 | 106.5 | 106.9 | 139.9 |
| 315 | 67.7 | 69.2 | 67.6 | 67.4 | 66.7 | 67.1 | 67.7 | 68.5 | 69.0 | 69.7 | 103.4 | 106.5 | 106.9 | 139.9 |
| 400 | 69.0 | 69.1 | 66.7 | 67.3 | 67.9 | 69.1 | 68.9 | 69.2 | 68.9 | 68.6 | 110.3 | 111.5 | 106.6 | 145.0 |
| 500 | 69.3 | 69.4 | 69.7 | 67.9 | 69.7 | 69.5 | 69.7 | 69.6 | 69.1 | 69.7 | 111.7 | 110.9 | 105.0 | 145.5 |
| 630 | 61.6 | 61.1 | 61.1 | 60.1 | 60.9 | 62.2 | 61.7 | 64.0 | 63.0 | 63.3 | 112.3 | 110.7 | 105.7 | 146.2 |
| 800 | 65.3 | 64.2 | 64.0 | 62.1 | 61.7 | 63.1 | 62.9 | 65.6 | 64.5 | 64.8 | 111.8 | 109.1 | 106.3 | 145.8 |
| 1000 | 64.7 | 61.6 | 63.0 | 62.3 | 63.2 | 64.3 | 64.1 | 66.3 | 64.6 | 67.7 | 111.6 | 107.4 | 105.3 | 145.4 |
| 1250 | 65.6 | 63.4 | 64.6 | 62.8 | 64.4 | 65.6 | 65.1 | 67.7 | 65.6 | 67.8 | 110.0 | 106.0 | 104.5 | 144.9 |
| 1600 | 64.2 | 65.6 | 65.3 | 64.2 | 64.5 | 65.4 | 65.9 | 66.6 | 66.3 | 67.9 | 108.6 | 105.8 | 104.1 | 144.7 |
| 2000 | 66.5 | 63.8 | 64.8 | 64.2 | 63.5 | 65.5 | 66.3 | 69.2 | 68.2 | 68.3 | 108.5 | 104.3 | 103.4 | 144.7 |
| 2500 | 66.4 | 65.5 | 65.6 | 63.9 | 65.2 | 66.3 | 67.5 | 69.9 | 67.6 | 68.3 | 109.0 | 106.1 | 104.4 | 145.5 |
| 3150 | 67.4 | 67.2 | 66.7 | 64.8 | 66.4 | 67.7 | 68.0 | 69.9 | 67.6 | 68.1 | 108.3 | 105.1 | 104.7 | 145.4 |
| 4000 | 68.5 | 68.7 | 68.4 | 67.6 | 67.3 | 68.1 | 68.1 | 69.1 | 67.3 | 68.5 | 107.8 | 104.3 | 104.0 | 145.6 |
| 5000 | 69.5 | 67.9 | 68.5 | 67.2 | 67.5 | 68.4 | 68.5 | 69.5 | 67.0 | 67.7 | 106.1 | 103.6 | 104.7 | 145.3 |
| 6300 | 68.0 | 67.4 | 67.6 | 67.7 | 67.8 | 69.7 | 69.6 | 69.6 | 69.2 | 69.6 | 104.2 | 101.5 | 102.6 | 144.6 |
| 8000 | 67.4 | 67.9 | 68.1 | 68.9 | 67.3 | 69.4 | 68.6 | 69.3 | 68.3 | 68.9 | 103.6 | 102.0 | 102.6 | 144.4 |
| 10000 | 67.7 | 67.5 | 66.7 | 66.7 | 66.7 | 69.7 | 68.1 | 69.0 | 67.4 | 68.2 | 102.4 | 101.8 | 103.4 | 144.2 |
| 12500 | 67.1 | 67.1 | 67.4 | 66.6 | 67.6 | 68.2 | 67.1 | 69.2 | 67.3 | 67.9 | 101.6 | 100.9 | 103.4 | 144.3 |
| 16000 | 65.7 | 65.7 | 65.3 | 65.2 | 67.3 | 67.6 | 66.2 | 68.2 | 66.8 | 67.5 | 98.5 | 99.2 | 101.9 | 144.1 |
| 20000 | 64.3 | 65.0 | 65.5 | 64.1 | 66.5 | 66.6 | 64.2 | 66.1 | 65.6 | 66.2 | 92.9 | 93.7 | 98.5 | 143.2 |
| 25000 | 60.2 | 63.5 | 62.9 | 63.3 | 64.8 | 64.7 | 60.8 | 68.6 | 65.9 | 65.1 | 94.2 | 93.0 | 96.7 | 143.8 |
| 31500 | 68.8 | 69.3 | 69.7 | 69.1 | 69.6 | 69.3 | 68.2 | 68.3 | 68.3 | 67.0 | 87.0 | 89.7 | 90.6 | 142.4 |
| 40000 | 66.0 | 64.7 | 66.1 | 67.8 | 69.1 | 68.5 | 62.3 | 61.5 | 67.3 | 63.0 | 62.1 | 61.8 | 65.7 | 143.6 |
| 50000 | 63.0 | 61.7 | 63.6 | 63.3 | 61.6 | 61.3 | 78.3 | 76.1 | 64.4 | 77.6 | 77.0 | 77.4 | 61.5 | 142.9 |
| 63000 | 75.1 | 73.6 | 74.5 | 76.2 | 73.1 | 73.0 | 72.7 | 70.1 | 78.0 | 72.7 | 72.8 | 71.0 | 75.6 | 141.0 |
| 80000 | 64.7 | 63.7 | 65.3 | 66.7 | 67.0 | 67.4 | 64.9 | 63.8 | 68.1 | 62.9 | 63.0 | 61.2 | 65.8 | 139.2 |
| 0ASPL | 109.0 | 108.6 | 108.6 | 107.8 | 109.0 | 109.8 | 109.3 | 111.5 | 117.7 | 119.7 | 121.5 | 119.8 | 117.7 | 158.5 |

MODEL/PULL SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 386.00 REFRACTION CORRECTION - YES
INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 5859 TAPS 27.32
LOCATION C41 ANECH CH AERO. RDG. ADH987 PAMB 29.5700 RELNUM 46.20

MODEL TEST POINT 7104 ACOUSTIC RANGE 12.2 M (. 40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.65 M/SEC (386.0 FPS) FREE-JET SPEED

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07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X71041

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 67.3 | 66.8 | 69.5 | 68.9 | 69.8 | 71.2 | 70.9 | 71.7 | 79.7 | 86.3 | 88.5 | 87.5 | 79.3 | 162.7 |
| 63 | 68.5 | 69.1 | 70.5 | 69.4 | 72.6 | 72.6 | 73.1 | 81.9 | 86.8 | 89.9 | 86.9 | 86.9 | 77.7 | 163.2 |
| 80 | 69.9 | 70.8 | 71.9 | 71.6 | 80.8 | 74.2 | 73.6 | 75.5 | 83.8 | 87.9 | 90.5 | 88.7 | 78.2 | 163.9 |
| 100 | 73.4 | 73.8 | 74.8 | 73.5 | 73.6 | 75.1 | 74.7 | 77.0 | 85.2 | 87.7 | 89.9 | 84.9 | 78.6 | 163.5 |
| 125 | 72.6 | 71.3 | 73.6 | 73.7 | 74.9 | 76.2 | 75.9 | 77.6 | 85.2 | 87.2 | 89.6 | 83.0 | 77.4 | 163.1 |
| 160 | 73.3 | 72.8 | 75.1 | 74.0 | 76.1 | 77.4 | 76.7 | 79.0 | 86.1 | 87.1 | 87.8 | 81.4 | 76.3 | 162.6 |
| 200 | 71.7 | 74.7 | 76.6 | 75.3 | 76.0 | 77.1 | 77.4 | 79.6 | 86.6 | 87.1 | 86.2 | 80.9 | 75.4 | 162.4 |
| 250 | 73.7 | 72.7 | 74.9 | 75.1 | 74.8 | 77.0 | 77.6 | 80.0 | 86.3 | 87.2 | 85.7 | 79.0 | 74.1 | 162.3 |
| 315 | 73.1 | 74.0 | 75.4 | 74.5 | 76.2 | 77.4 | 76.5 | 80.5 | 87.6 | 86.8 | 85.7 | 80.2 | 74.2 | 163.1 |
| 400 | 73.6 | 75.3 | 76.1 | 75.0 | 77.2 | 78.6 | 78.7 | 81.2 | 87.0 | 86.3 | 84.5 | 78.5 | 73.6 | 163.1 |
| 500 | 74.3 | 76.5 | 77.5 | 77.6 | 77.8 | 78.7 | 78.6 | 81.1 | 86.3 | 86.4 | 83.6 | 77.1 | 71.9 | 163.2 |
| 630 | 74.8 | 75.2 | 77.2 | 76.9 | 77.7 | 79.7 | 79.7 | 81.3 | 85.8 | 85.0 | 81.4 | 75.7 | 71.5 | 162.9 |
| 800 | 72.8 | 74.4 | 76.1 | 77.1 | 77.7 | 79.8 | 79.8 | 80.6 | 84.9 | 83.2 | 79.6 | 72.9 | 68.2 | 162.3 |
| 1000 | 71.8 | 74.6 | 76.3 | 76.1 | 77.1 | 79.4 | 78.6 | 79.5 | 83.5 | 82.6 | 78.1 | 72.7 | 67.4 | 162.1 |
| 1250 | 71.6 | 73.8 | 75.5 | 75.7 | 77.4 | 79.5 | 77.7 | 79.0 | 82.1 | 80.5 | 76.3 | 71.7 | 66.5 | 161.9 |
| 1600 | 70.1 | 72.9 | 75.0 | 75.3 | 77.0 | 77.8 | 76.4 | 77.9 | 79.9 | 79.7 | 74.8 | 69.5 | 64.1 | 162.0 |
| 2000 | 67.7 | 70.9 | 72.5 | 73.7 | 76.5 | 77.2 | 75.4 | 76.7 | 78.1 | 76.6 | 70.5 | 66.1 | 59.6 | 161.8 |
| 2500 | 64.6 | 68.9 | 71.8 | 71.9 | 75.1 | 75.5 | 72.8 | 73.9 | 73.8 | 69.6 | 63.1 | 57.9 | 51.3 | 160.9 |
| 3150 | 57.1 | 65.0 | 67.3 | 69.6 | 72.1 | 72.3 | 68.1 | 65.9 | 70.3 | 67.6 | 61.1 | 52.2 | 41.1 | 161.5 |
| 4000 | 49.4 | 56.0 | 61.3 | 63.1 | 64.9 | 65.1 | 62.5 | 61.3 | 59.9 | 55.0 | 47.6 | 35.9 | 20.5 | 160.1 |
| 5000 | 36.8 | 43.9 | 52.5 | 55.3 | 59.4 | 58.4 | 51.6 | 49.0 | 51.7 | 42.2 | 33.0 | 18.3 | | 161.2 |
| 6300 | 16.1 | 26.7 | 35.9 | 40.0 | 40.8 | 41.3 | 37.5 | 32.9 | 36.7 | 22.6 | 10.0 | | | 160.5 |
| 8000 | | | 5.4 | 13.7 | 14.2 | 15.3 | 13.8 | 7.6 | 8.9 | | | | | 158.7 |
| 10000 | | | | | | | | | | | | | | 156.9 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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QASPL 84.6 85.9 87.6 87.4 89.2 90.1 89.6 91.4 97.2 98.1 98.7 94.3 87.3 175.9

PNL 90.9 93.4 95.8 96.0 98.3 99.1 97.6 98.9 103.0 102.6 100.7 95.2 89.1

PNLT 90.9 93.4 96.5 96.6 99.8 100.2 98.1 99.4 103.7 103.8 102.0 96.4 90.2

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 IALPHA SB59 TAMB 27.32
LOCATION C41 ANECH CH AERO. RDG. ADH987 PAMB 29.5700 RELHUM 46.20

MODEL TEST POINT 7104 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.65 M/SEC (388.0 FPS) FREE-JET SPEED

08/30/79 19.452

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X71050
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

97.4

99.9

100.0

100.4

102.2

104.0

104.9

107.7

112.6

113.9

115.1

117.2

114.7

152.8

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TEST DATE 02-21-78 TAPE NO. N294 ALPHA 8859 TAMB 23.00
LOCATION C41 ANECH CH AERO. RDG. ADH090 PAMB 29.3650 RELHUM 43.00

MODEL TEST POINT 7105 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. M/SEC (0. FPS)
FREE-JET SPEED

55

53

08/30/79 19.452

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X71050

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 78.0 | 83.6 | 81.6 | 82.4 | 83.5 | 85.6 | 87.5 | 89.1 | 93.8 | 97.4 | 101.5 | 105.7 | 105.1 | 138.7 |
| 315 | 79.4 | 82.7 | 83.2 | 83.5 | 85.1 | 86.9 | 87.8 | 90.0 | 95.7 | 99.0 | 102.6 | 106.8 | 105.5 | 139.7 |
| 400 | 80.7 | 83.7 | 84.0 | 84.0 | 85.1 | 87.2 | 88.6 | 90.2 | 96.7 | 101.8 | 104.2 | 107.1 | 105.3 | 140.6 |
| 500 | 81.5 | 84.3 | 85.3 | 84.3 | 86.7 | 88.3 | 89.4 | 91.3 | 97.5 | 102.6 | 104.5 | 106.4 | 104.1 | 140.5 |
| 630 | 81.8 | 85.1 | 85.4 | 86.2 | 89.3 | 89.4 | 90.3 | 92.9 | 98.9 | 103.0 | 104.9 | 106.0 | 102.7 | 140.7 |
| 800 | 84.9 | 85.7 | 86.4 | 87.5 | 87.8 | 90.4 | 91.6 | 94.0 | 100.4 | 103.0 | 104.1 | 105.3 | 102.5 | 140.5 |
| 1000 | 86.7 | 87.3 | 88.5 | 87.6 | 88.7 | 91.3 | 92.4 | 95.1 | 101.5 | 103.4 | 103.7 | 104.2 | 101.3 | 140.5 |
| 1250 | 84.8 | 89.1 | 89.4 | 88.4 | 90.0 | 92.4 | 93.0 | 95.9 | 101.3 | 102.7 | 104.1 | 105.0 | 101.7 | 140.7 |
| 1600 | 86.7 | 88.5 | 88.3 | 89.1 | 89.9 | 92.3 | 93.7 | 96.3 | 101.7 | 102.7 | 104.1 | 105.6 | 101.6 | 140.9 |
| 2000 | 86.4 | 89.4 | 88.7 | 89.4 | 89.5 | 91.6 | 93.3 | 96.4 | 102.1 | 102.8 | 103.5 | 104.4 | 100.7 | 140.6 |
| 2500 | 86.5 | 88.8 | 89.1 | 89.1 | 90.4 | 92.1 | 93.7 | 96.6 | 101.5 | 102.7 | 102.9 | 104.8 | 100.3 | 140.5 |
| 3150 | 87.1 | 90.4 | 89.4 | 89.9 | 90.2 | 92.6 | 94.0 | 97.2 | 102.3 | 101.5 | 101.7 | 104.1 | 100.1 | 140.3 |
| 4000 | 87.2 | 89.0 | 88.5 | 88.8 | 89.6 | 92.2 | 93.6 | 97.0 | 100.9 | 100.2 | 101.0 | 102.7 | 98.4 | 139.3 |
| 5000 | 86.8 | 87.9 | 87.9 | 89.1 | 89.9 | 92.0 | 93.7 | 96.9 | 100.6 | 100.1 | 99.9 | 102.3 | 99.3 | 139.1 |
| 6300 | 85.5 | 87.1 | 88.2 | 88.6 | 89.6 | 92.5 | 93.2 | 96.4 | 100.3 | 98.5 | 98.8 | 102.4 | 99.8 | 138.9 |
| 8000 | 84.9 | 87.3 | 87.2 | 87.8 | 89.8 | 91.7 | 92.5 | 95.4 | 99.3 | 97.7 | 98.0 | 101.6 | 99.4 | 138.5 |
| 10000 | 82.5 | 85.6 | 86.3 | 87.4 | 89.5 | 92.2 | 92.0 | 94.9 | 97.9 | 97.0 | 96.6 | 100.7 | 98.6 | 138.1 |
| 12500 | 79.8 | 83.9 | 84.1 | 85.7 | 87.8 | 90.4 | 90.6 | 92.7 | 95.6 | 94.9 | 94.1 | 98.4 | 96.6 | 136.8 |
| 16000 | 78.1 | 82.3 | 83.2 | 85.0 | 87.2 | 89.4 | 88.9 | 91.7 | 93.9 | 94.1 | 92.5 | 96.5 | 95.0 | 136.8 |
| 20000 | 72.3 | 79.7 | 79.9 | 81.8 | 86.1 | 88.2 | 85.6 | 88.4 | 90.7 | 90.7 | 89.2 | 93.4 | 91.7 | 135.6 |
| 25000 | 70.6 | 75.0 | 77.2 | 78.3 | 83.2 | 84.6 | 83.4 | 83.4 | 88.2 | 86.0 | 85.4 | 89.1 | 89.4 | 134.4 |
| 31500 | 68.7 | 71.2 | 74.7 | 76.9 | 77.6 | 78.7 | 78.6 | 80.4 | 83.8 | 84.5 | 82.6 | 83.9 | 83.5 | 133.5 |
| 40000 | 62.9 | 66.2 | 69.2 | 71.1 | 75.1 | 76.4 | 73.4 | 74.9 | 78.4 | 78.8 | 77.0 | 77.7 | 78.6 | 132.5 |
| 50000 | 56.0 | 58.8 | 61.5 | 64.7 | 66.7 | 68.7 | 68.1 | 67.8 | 73.8 | 71.8 | 70.8 | 72.4 | 72.3 | 130.6 |
| 63000 | 50.4 | 52.8 | 54.9 | 57.3 | 58.4 | 59.9 | 62.1 | 60.5 | 68.6 | 64.5 | 64.1 | 66.3 | 65.7 | 129.4 |
| 80000 | 44.4 | 45.7 | 48.9 | 51.6 | 51.6 | 53.7 | 54.5 | 54.2 | 61.3 | 57.6 | 57.6 | 58.3 | 57.7 | 129.1 |
| 0ASPL | 97.4 | 99.9 | 100.0 | 100.4 | 102.2 | 104.0 | 104.9 | 107.7 | 112.6 | 113.9 | 115.1 | 117.2 | 114.7 | 152.8 |

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES TURBULANCE CORRECTION - YES

TEST DATE 02-21-78 TAPE NO. N294 ALPHA SB59 TAMB 23.00
 LOCATION C41 ANECH CH AERG. RDG. ADH090 PAMB 29.3650 RELHUM 43.00

MODEL TEST POINT 7105 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED 0. M/SEC (0. FPS)

08/30/79 19.452

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X71051

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 58.9 | 63.4 | 64.8 | 65.5 | 67.0 | 69.3 | 70.5 | 71.8 | 77.5 | 81.5 | 82.4 | 83.1 | 77.9 | 158.2 |
| 63 | 59.7 | 64.0 | 66.1 | 65.9 | 68.6 | 70.4 | 71.4 | 72.9 | 78.3 | 82.3 | 82.7 | 82.4 | 76.7 | 159.2 |
| 80 | 60.0 | 64.8 | 66.2 | 67.7 | 75.4 | 71.4 | 72.2 | 74.4 | 79.7 | 82.7 | 83.0 | 81.9 | 75.2 | 158.4 |
| 100 | 62.9 | 65.3 | 67.1 | 68.9 | 69.7 | 72.4 | 73.4 | 75.4 | 81.1 | 82.6 | 82.2 | 81.1 | 74.8 | 158.2 |
| 125 | 64.7 | 66.8 | 69.2 | 68.9 | 70.4 | 73.2 | 74.2 | 76.4 | 82.2 | 82.9 | 81.7 | 79.8 | 73.5 | 158.1 |
| 160 | 62.6 | 68.5 | 69.9 | 69.7 | 71.7 | 74.2 | 74.7 | 77.2 | 81.8 | 82.1 | 81.9 | 80.4 | 73.5 | 158.4 |
| 200 | 64.2 | 67.7 | 68.6 | 70.2 | 71.4 | 73.9 | 75.2 | 77.4 | 82.0 | 81.8 | 81.6 | 80.7 | 72.9 | 158.6 |
| 250 | 63.6 | 68.3 | 68.3 | 70.3 | 70.8 | 73.1 | 74.6 | 77.3 | 82.2 | 81.7 | 80.7 | 79.1 | 71.3 | 158.3 |
| 315 | 63.3 | 67.4 | 68.9 | 69.7 | 71.5 | 73.2 | 74.7 | 77.2 | 81.3 | 81.3 | 79.7 | 78.9 | 70.2 | 158.2 |
| 400 | 63.3 | 68.5 | 68.8 | 70.2 | 71.0 | 73.6 | 74.7 | 77.4 | 81.7 | 79.7 | 78.0 | 77.6 | 69.0 | 157.9 |
| 500 | 62.9 | 66.7 | 67.6 | 68.7 | 70.0 | 72.8 | 74.0 | 77.0 | 80.0 | 77.9 | 76.8 | 75.5 | 67.3 | 157.0 |
| 630 | 62.1 | 65.2 | 66.7 | 68.8 | 70.1 | 72.4 | 73.9 | 76.5 | 79.3 | 77.4 | 75.2 | 74.4 | 66.1 | 156.8 |
| 800 | 60.3 | 64.1 | 66.6 | 68.0 | 69.6 | 72.8 | 73.1 | 75.8 | 78.8 | 75.5 | 73.6 | 73.8 | 65.5 | 156.6 |
| 1000 | 59.3 | 64.0 | 65.4 | 67.0 | 69.6 | 71.7 | 72.3 | 74.6 | 77.5 | 74.4 | 72.3 | 72.4 | 63.9 | 156.1 |
| 1250 | 56.4 | 62.0 | 64.3 | 66.5 | 69.2 | 72.0 | 71.7 | 73.9 | 75.9 | 73.3 | 70.5 | 70.6 | 61.6 | 155.8 |
| 1600 | 52.8 | 59.7 | 61.7 | 64.4 | 67.1 | 70.0 | 70.0 | 71.4 | 73.2 | 70.6 | 67.1 | 67.0 | 57.3 | 154.5 |
| 2000 | 50.1 | 57.5 | 60.4 | 63.5 | 66.4 | 68.9 | 68.1 | 70.2 | 71.1 | 69.3 | 64.5 | 63.5 | 52.7 | 154.5 |
| 2500 | 42.5 | 53.6 | 56.2 | 59.6 | 64.7 | 67.1 | 64.2 | 66.2 | 67.0 | 64.7 | 59.4 | 57.6 | 44.5 | 153.2 |
| 3150 | 37.5 | 46.5 | 51.7 | 54.6 | 60.5 | 62.2 | 60.7 | 59.6 | 62.7 | 57.5 | 52.2 | 48.3 | 33.8 | 152.1 |
| 4000 | 29.3 | 38.0 | 45.3 | 49.8 | 51.9 | 53.4 | 52.9 | 53.3 | 54.4 | 51.3 | 43.3 | 34.1 | 13.4 | 151.2 |
| 5000 | 13.8 | 25.4 | 33.5 | 38.7 | 44.4 | 46.2 | 42.7 | 42.5 | 42.8 | 38.0 | 27.9 | 14.2 | 150.2 | |
| 6300 | 3.8 | 13.8 | 21.5 | 25.9 | 28.7 | 27.3 | 24.6 | 26.1 | 16.8 | 3.9 | | | 148.2 | |
| 8000 | | | | | | 2.1 | 3.2 | | | | | | 147.1 | |
| 12000 | | | | | | | | | | | | | 146.6 | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

ORIGINAL PAGE IS
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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| CASPL | 74.0 | 78.1 | 79.5 | 80.6 | 82.9 | 84.7 | 85.6 | 88.0 | 92.2 | 92.5 | 92.0 | 91.2 | 84.6 | 170.1 |
| PNL | 77.8 | 83.1 | 84.6 | 86.7 | 89.5 | 91.8 | 91.7 | 93.8 | 97.4 | 96.1 | 94.4 | 93.4 | 85.0 | |
| PNLT | 77.8 | 84.1 | 84.6 | 86.7 | 90.7 | 92.9 | 91.7 | 93.8 | 97.4 | 96.1 | 94.4 | 93.4 | 86.1 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-21-78 TAPE NO. N294 ALPHA SB59 TAMB 23.00
LOCATION C41 ANECH CH AERG. RDG. ADH090 PAMB 29.3650 RELHUM 43.00

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
7100 7105 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)

51
51

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X71060
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

150

200

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 72.4 | 73.9 | 74.0 | 75.6 | 76.9 | 77.6 | 79.6 | 81.7 | 84.5 | 91.1 | 95.4 | 98.7 | 97.6 | 131.6 |
| 315 | 73.7 | 74.7 | 75.9 | 76.3 | 77.5 | 79.0 | 80.1 | 81.9 | 86.0 | 92.0 | 96.1 | 99.5 | 96.5 | 132.2 |
| 400 | 75.2 | 75.9 | 76.5 | 76.4 | 77.6 | 79.6 | 80.7 | 82.5 | 87.1 | 95.2 | 98.1 | 99.1 | 93.5 | 132.9 |
| 500 | 75.1 | 75.9 | 73.1 | 77.1 | 80.1 | 80.9 | 82.1 | 84.1 | 88.1 | 96.5 | 98.7 | 97.6 | 90.3 | 133.0 |
| 630 | 75.9 | 77.4 | 78.6 | 78.7 | 86.1 | 81.9 | 83.1 | 85.9 | 90.7 | 97.4 | 99.1 | 95.0 | 87.1 | 133.3 |
| 800 | 78.0 | 77.5 | 79.3 | 80.3 | 80.9 | 83.0 | 84.2 | 87.2 | 91.6 | 98.2 | 98.8 | 92.7 | 85.3 | 133.3 |
| 1000 | 79.2 | 77.9 | 80.5 | 80.5 | 81.3 | 84.2 | 85.7 | 88.4 | 93.4 | 98.3 | 97.9 | 90.3 | 83.9 | 133.3 |
| 1250 | 77.9 | 80.1 | 81.9 | 82.2 | 83.0 | 85.1 | 86.1 | 89.8 | 93.5 | 98.2 | 97.5 | 88.6 | 83.6 | 133.2 |
| 1600 | 80.5 | 79.0 | 80.8 | 82.1 | 84.0 | 85.6 | 87.5 | 90.5 | 94.2 | 97.8 | 96.5 | 88.2 | 81.7 | 133.1 |
| 2000 | 79.2 | 80.4 | 81.4 | 81.9 | 83.0 | 85.4 | 87.8 | 90.8 | 94.5 | 97.9 | 94.8 | 87.2 | 82.8 | 132.9 |
| 2500 | 80.1 | 80.9 | 82.1 | 82.6 | 84.2 | 86.1 | 88.2 | 91.0 | 93.9 | 97.3 | 94.3 | 87.4 | 81.2 | 132.6 |
| 3150 | 80.7 | 82.2 | 82.0 | 83.2 | 84.5 | 87.1 | 88.6 | 91.5 | 94.5 | 96.2 | 93.3 | 86.7 | 81.0 | 132.4 |
| 4000 | 79.6 | 80.4 | 82.4 | 82.8 | 84.1 | 86.5 | 88.0 | 91.4 | 93.2 | 95.3 | 92.5 | 85.6 | 79.6 | 131.7 |
| 5000 | 79.3 | 80.2 | 81.7 | 82.3 | 84.2 | 87.0 | 88.5 | 91.4 | 93.2 | 94.9 | 91.5 | 85.6 | 79.3 | 131.7 |
| 6300 | 78.2 | 79.9 | 81.6 | 82.0 | 84.3 | 87.4 | 88.4 | 90.9 | 93.0 | 94.6 | 90.3 | 84.8 | 79.5 | 131.6 |
| 8000 | 78.3 | 80.5 | 81.1 | 81.9 | 84.2 | 86.8 | 88.2 | 90.6 | 93.1 | 93.0 | 89.2 | 83.8 | 79.1 | 131.4 |
| 10000 | 77.4 | 79.1 | 81.3 | 82.6 | 84.6 | 87.2 | 87.4 | 90.0 | 92.1 | 92.5 | 88.3 | 83.8 | 78.4 | 131.4 |
| 12500 | 75.6 | 78.2 | 79.1 | 80.8 | 83.6 | 85.9 | 86.2 | 88.6 | 90.5 | 90.5 | 87.0 | 82.9 | 77.7 | 130.6 |
| 16000 | 74.8 | 77.8 | 78.8 | 80.8 | 83.2 | 85.4 | 85.4 | 87.8 | 88.9 | 90.2 | 85.1 | 82.3 | 77.7 | 131.2 |
| 20000 | 70.2 | 75.2 | 76.7 | 78.0 | 81.9 | 83.5 | 82.4 | 84.3 | 86.7 | 86.7 | 82.4 | 80.1 | 76.0 | 130.2 |
| 25000 | 70.3 | 72.4 | 74.9 | 74.9 | 79.7 | 81.0 | 79.6 | 79.7 | 83.5 | 82.1 | 79.3 | 76.8 | 74.4 | 129.3 |
| 31500 | 68.4 | 69.3 | 72.5 | 74.0 | 74.7 | 76.2 | 76.1 | 77.2 | 80.3 | 80.2 | 76.3 | 71.9 | 68.9 | 129.3 |
| 40000 | 63.5 | 64.5 | 67.5 | 69.3 | 72.8 | 73.7 | 70.3 | 72.1 | 75.5 | 73.8 | 70.8 | 66.5 | 64.4 | 128.6 |
| 50000 | 57.1 | 57.6 | 60.1 | 62.7 | 64.6 | 66.0 | 65.2 | 64.8 | 69.6 | 66.3 | 63.6 | 60.9 | 59.1 | 126.1 |
| 63000 | 51.8 | 52.2 | 54.3 | 57.1 | 56.6 | 57.8 | 59.5 | 57.7 | 63.9 | 58.1 | 57.4 | 54.7 | 52.7 | 124.9 |
| 80000 | 45.8 | 45.3 | 48.1 | 51.4 | 50.0 | 52.2 | 51.7 | 50.7 | 56.7 | 51.4 | 50.9 | 46.2 | 44.1 | 124.9 |
| OASPL | 90.9 | 92.0 | 93.3 | 94.1 | 96.5 | 98.2 | 99.3 | 102.1 | 105.1 | 108.7 | 108.3 | 106.2 | 102.0 | 145.7 |

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OF POOR QUALITY

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 33.00
LOCATION C41 ANECH CH AERO. RDG. ADH136 PAMB 29.5900 RELHUM 52.30

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.65 M/SEC (386.0 FPS)
7100 7106 SIZE

FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X71060

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | | | | | | | | | | | | | | |
| 315 | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | | |
| 630 | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | |
| 1000 | | | | | | | | | | | | | | |
| 1250 | | | | | | | | | | | | | | |
| 1600 | | | | | | | | | | | | | | |
| 2000 | | | | | | | | | | | | | | |
| 2500 | | | | | | | | | | | | | | |
| 3150 | | | | | | | | | | | | | | |
| 4000 | | | | | | | | | | | | | | |
| 5000 | | | | | | | | | | | | | | |
| 6300 | | | | | | | | | | | | | | |
| 8000 | | | | | | | | | | | | | | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |
| 0ASPL | 99.0 | 99.1 | 98.5 | 99.9 | 100.4 | 100.3 | 101.7 | 105.4 | 107.8 | 106.9 | 105.1 | 104.9 | 146.6 | |

ORIGINAL PAGE IS
OF POOR QUALITYREFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YESFREE JET VELOCITY (FT/SEC) 386.00
FREE JET DIAMETER (IN) 48.00MODEL/FULL SIZE SCALE FACTOR
INPUT 1.000 CALC. 1.000

| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | SB59 | TAMB | 33.00 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH136 | PAMB | 29.5900 | RELHUM | 52.30 |

| MODEL | TEST POINT | ACOUSTIC RANGE | FREE-JET SPEED |
|-------|------------|-----------------------|---------------------------|
| 7100 | 7106 | 12.2 M (40.0 FT) ARC | 117.65 M/SEC (386.0 FPS) |

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X71061

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 58.8 | 60.2 | 61.3 | 61.0 | 61.1 | 61.9 | 61.9 | 62.4 | 66.8 | 73.8 | 74.5 | 72.8 | 65.6 | 149.1 |
| 63 | 59.3 | 60.8 | 61.4 | 60.8 | 63.9 | 63.2 | 63.1 | 63.6 | 69.3 | 74.5 | 74.8 | 70.5 | 64.0 | 149.0 |
| 80 | 60.6 | 61.7 | 58.7 | 61.9 | 72.4 | 64.3 | 63.9 | 65.1 | 70.7 | 73.6 | 75.1 | 69.4 | 64.7 | 149.9 |
| 100 | 64.0 | 65.4 | 65.8 | 64.6 | 64.7 | 65.4 | 65.1 | 66.4 | 72.7 | 76.2 | 74.8 | 68.2 | 65.6 | 150.2 |
| 125 | 63.1 | 63.1 | 64.7 | 65.0 | 65.1 | 66.7 | 66.6 | 67.6 | 72.9 | 76.0 | 74.3 | 66.3 | 65.0 | 150.0 |
| 160 | 64.1 | 63.4 | 65.8 | 65.2 | 66.9 | 67.7 | 67.0 | 69.0 | 73.6 | 75.5 | 73.0 | 66.3 | 62.0 | 149.9 |
| 200 | 62.7 | 65.5 | 67.2 | 66.8 | 67.8 | 68.4 | 68.5 | 69.7 | 74.0 | 75.9 | 71.6 | 64.7 | 63.6 | 150.4 |
| 250 | 65.1 | 64.2 | 65.9 | 66.7 | 66.9 | 68.1 | 68.9 | 70.1 | 73.5 | 75.3 | 70.9 | 64.6 | 61.2 | 150.2 |
| 315 | 63.3 | 65.3 | 66.3 | 66.4 | 68.0 | 68.8 | 69.3 | 70.3 | 74.3 | 74.4 | 70.3 | 64.1 | 61.3 | 150.5 |
| 400 | 63.7 | 65.4 | 66.8 | 66.9 | 68.3 | 69.9 | 69.9 | 71.1 | 73.2 | 73.7 | 69.4 | 62.5 | 58.7 | 150.5 |
| 500 | 63.8 | 66.4 | 66.4 | 67.3 | 68.1 | 69.5 | 69.5 | 71.2 | 73.2 | 73.1 | 68.0 | 62.0 | 57.5 | 150.7 |
| 630 | 62.1 | 64.2 | 66.6 | 66.9 | 68.9 | 70.4 | 70.3 | 71.3 | 73.0 | 72.7 | 66.8 | 61.2 | 57.7 | 151.0 |
| 800 | 63.9 | 65.8 | 67.4 | 67.6 | 68.8 | 70.5 | 70.2 | 70.8 | 73.3 | 71.4 | 65.9 | 60.4 | 57.4 | 151.5 |
| 1000 | 62.3 | 65.1 | 67.0 | 66.9 | 68.5 | 69.8 | 70.1 | 70.6 | 72.4 | 71.0 | 65.0 | 60.2 | 56.2 | 151.5 |
| 1250 | 61.7 | 65.2 | 66.1 | 66.5 | 68.8 | 70.1 | 69.3 | 70.1 | 71.2 | 69.2 | 63.9 | 59.3 | 54.6 | 151.6 |
| 1600 | 59.6 | 62.9 | 65.6 | 66.5 | 67.5 | 68.5 | 67.8 | 68.3 | 70.0 | 69.3 | 62.1 | 58.2 | 52.9 | 151.9 |
| 2000 | 56.4 | 60.9 | 62.5 | 64.0 | 66.9 | 67.8 | 66.9 | 67.7 | 69.4 | 66.2 | 59.4 | 56.2 | 48.8 | 151.8 |
| 2500 | 53.4 | 58.9 | 60.9 | 62.9 | 65.1 | 65.4 | 63.5 | 63.9 | 64.0 | 59.8 | 53.4 | 47.6 | 40.4 | 150.9 |
| 3150 | 44.8 | 53.3 | 56.3 | 57.9 | 61.5 | 61.6 | 59.8 | 56.9 | 50.2 | 57.1 | 49.2 | 40.4 | 29.7 | 150.7 |
| 4000 | 37.9 | 44.9 | 49.9 | 50.8 | 53.0 | 53.9 | 52.8 | 51.7 | 53.1 | 47.5 | 38.9 | 27.1 | 11.4 | 150.1 |
| 5000 | 22.7 | 31.2 | 38.8 | 42.5 | 46.6 | 46.5 | 42.1 | 41.6 | 40.6 | 31.8 | 20.8 | 6.6 | | 149.3 |
| 6300 | 2.2 | 14.0 | 23.0 | 27.8 | 28.3 | 29.0 | 26.5 | 22.8 | 23.7 | 10.2 | | | | 148.0 |
| 8000 | | | | 1.0 | 1.7 | 3.0 | 2.6 | | | | | | | 146.7 |
| 10000 | | | | | | | | | | | | | | 145.1 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

ORIGINAL PAGE 19
OF POOR QUALITY

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| GASPL | 74.9 | 76.6 | 78.0 | 78.3 | 80.3 | 80.8 | 80.8 | 81.6 | 84.7 | 86.2 | 83.8 | 78.5 | 74.1 | 164.1 |
| PNL | 80.3 | 83.4 | 85.5 | 86.5 | 88.5 | 89.3 | 89.6 | 89.2 | 91.3 | 90.9 | 85.9 | 79.9 | 75.4 | |
| PNLT | 80.3 | 83.4 | 86.2 | 87.1 | 89.8 | 90.4 | 88.6 | 89.2 | 91.3 | 90.8 | 85.9 | 79.9 | 75.4 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 33.00
 LOCATION C41 ANECH CH AERO. RDG. ADH136 PAMB 29.5900 RELHUM 52.30

MODEL TEST POINT 7106 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE FREE-JET SPEED 117.65 M/SEC (386.0 FPS)

07/19/79 18.662

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 40.0 FT., ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X71070
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | SPL |
|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 79.3 | 85.3 | 82.8 | 83.9 | 85.2 | 87.6 | 89.5 | 90.6 | 95.3 | 99.4 | 103.5 | 107.0 | 106.9 | 140.4 |
| 315 | 81.1 | 86.4 | 85.2 | 86.8 | 88.4 | 89.1 | 91.5 | 97.7 | 101.3 | 105.1 | 108.8 | 107.2 | 141.6 | |
| 400 | 82.7 | 85.0 | 85.5 | 85.5 | 86.9 | 89.2 | 90.4 | 92.0 | 98.5 | 104.5 | 107.7 | 109.9 | 108.0 | 143.4 |
| 500 | 83.3 | 85.8 | 86.8 | 86.4 | 89.7 | 89.8 | 91.4 | 92.6 | 99.6 | 105.6 | 108.5 | 110.7 | 108.4 | 144.3 |
| 630 | 83.9 | 86.7 | 87.7 | 87.7 | 88.8 | 91.2 | 92.1 | 95.0 | 100.7 | 105.5 | 108.4 | 110.6 | 108.0 | 144.5 |
| 800 | 86.9 | 86.7 | 88.0 | 89.5 | 89.9 | 92.0 | 93.4 | 95.8 | 102.0 | 105.6 | 107.7 | 109.6 | 108.3 | 144.0 |
| 1000 | 89.3 | 89.3 | 90.8 | 89.6 | 90.7 | 92.8 | 94.2 | 96.4 | 103.0 | 105.2 | 105.8 | 107.5 | 106.9 | 142.9 |
| 1250 | 86.4 | 90.2 | 90.5 | 90.5 | 91.8 | 93.7 | 95.1 | 97.5 | 103.1 | 104.6 | 105.9 | 107.1 | 106.0 | 142.8 |
| 1600 | 88.2 | 88.9 | 89.6 | 90.7 | 91.7 | 93.8 | 95.5 | 97.7 | 103.3 | 104.7 | 104.7 | 106.9 | 105.6 | 142.5 |
| 2000 | 87.7 | 89.7 | 90.2 | 90.0 | 90.6 | 92.7 | 94.6 | 97.7 | 103.4 | 104.6 | 103.3 | 105.5 | 104.0 | 141.8 |
| 2500 | 87.3 | 89.1 | 89.9 | 90.9 | 91.7 | 93.6 | 95.4 | 97.9 | 103.0 | 104.5 | 102.6 | 105.1 | 103.3 | 141.6 |
| 3150 | 87.5 | 89.3 | 89.6 | 90.6 | 91.2 | 93.5 | 95.4 | 98.3 | 103.5 | 102.5 | 102.4 | 104.3 | 102.1 | 141.1 |
| 4000 | 87.3 | 88.3 | 89.1 | 89.6 | 90.4 | 93.0 | 94.7 | 97.4 | 102.2 | 101.0 | 100.9 | 102.1 | 100.6 | 139.8 |
| 5000 | 86.6 | 87.9 | 88.6 | 89.1 | 90.5 | 93.1 | 94.5 | 97.4 | 101.3 | 101.0 | 99.9 | 101.6 | 100.1 | 139.5 |
| 6300 | 85.5 | 87.6 | 88.3 | 88.8 | 90.6 | 93.0 | 94.4 | 96.3 | 100.7 | 99.7 | 99.0 | 100.9 | 100.3 | 139.1 |
| 8000 | 84.8 | 87.2 | 87.3 | 87.9 | 90.0 | 91.9 | 93.2 | 95.5 | 99.7 | 98.3 | 97.6 | 100.1 | 99.6 | 138.4 |
| 10000 | 82.9 | 85.5 | 86.9 | 87.3 | 90.4 | 92.5 | 92.7 | 95.0 | 98.0 | 97.0 | 95.2 | 99.1 | 98.5 | 137.9 |
| 12500 | 80.2 | 84.3 | 85.2 | 86.6 | 88.9 | 90.3 | 91.2 | 93.3 | 95.7 | 95.1 | 94.2 | 96.8 | 96.7 | 136.8 |
| 16000 | 78.2 | 82.9 | 84.4 | 85.3 | 88.3 | 90.0 | 89.2 | 91.3 | 93.4 | 93.4 | 91.8 | 95.2 | 94.9 | 136.4 |
| 20000 | 73.2 | 80.4 | 81.0 | 83.1 | 86.9 | 88.8 | 86.9 | 88.5 | 90.3 | 90.2 | 88.7 | 92.0 | 91.3 | 135.5 |
| 25000 | 72.0 | 76.2 | 79.0 | 79.9 | 84.0 | 85.4 | 83.2 | 83.7 | 88.0 | 86.5 | 85.2 | 87.7 | 89.1 | 134.5 |
| 31500 | 70.3 | 73.0 | 76.0 | 78.7 | 79.2 | 80.3 | 79.9 | 80.7 | 84.0 | 84.3 | 83.2 | 83.0 | 83.6 | 134.0 |
| 40000 | 66.3 | 68.0 | 70.9 | 72.9 | 77.5 | 78.4 | 75.0 | 75.5 | 78.7 | 78.5 | 77.3 | 77.5 | 79.2 | 133.4 |
| 50000 | 59.6 | 61.8 | 64.3 | 67.0 | 69.5 | 70.5 | 70.0 | 68.6 | 73.8 | 72.3 | 70.9 | 72.5 | 72.6 | 131.5 |
| 63000 | 54.3 | 55.4 | 58.2 | 60.9 | 61.3 | 62.2 | 64.0 | 61.8 | 69.4 | 64.0 | 64.1 | 66.9 | 66.5 | 130.5 |
| 80000 | 47.8 | 48.5 | 51.6 | 55.0 | 54.0 | 55.9 | 56.4 | 55.6 | 61.6 | 56.9 | 59.4 | 58.7 | 59.4 | 130.3 |
| 0ASPL | 98.5 | 100.4 | 101.1 | 101.5 | 104.3 | 105.0 | 106.3 | 108.7 | 113.9 | 115.8 | 117.2 | 119.4 | 118.0 | 154.6 |

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TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAMB 28.04
LOCATION C41 ANECH CH AERO. RDG. ADH069 PAMB 29.3030 RELHUM 21.00

MODEL TEST POINT 7107 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED 0. FPS

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X71070

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

OSPL 98.5 100.4 101.1 101.5 104.3 105.0 106.3 108.7 113.9 115.8 117.2 119.4 118.0 154.6

MODEL/ELLI SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 0. REACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAMB 28.04
LOCATION C41 ANECH CH AERO. RDG. ADH069 PAMB 29.3030 RELHUM 21.00

MODEL TEST POINT 7107 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

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07/19/79 16.662

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X71071

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 60.9 | 64.7 | 66.3 | 67.1 | 68.8 | 71.3 | 72.3 | 73.6 | 79.3 | 84.3 | 85.9 | 85.9 | 80.7 | 161.1 |
| 63 | 61.4 | 65.5 | 67.6 | 67.9 | 71.6 | 71.9 | 73.4 | 74.1 | 80.4 | 85.4 | 86.7 | 86.7 | 81.5 | 161.9 |
| 80 | 62.0 | 66.4 | 68.5 | 69.2 | 80.7 | 73.2 | 74.0 | 76.5 | 81.5 | 85.2 | 86.5 | 86.5 | 81.5 | 162.2 |
| 100 | 65.0 | 66.3 | 68.7 | 71.0 | 71.7 | 74.0 | 75.2 | 77.2 | 82.7 | 85.2 | 85.7 | 85.4 | 80.6 | 161.6 |
| 125 | 67.2 | 68.9 | 71.5 | 71.0 | 72.5 | 74.7 | 76.0 | 77.7 | 83.7 | 84.7 | 83.7 | 83.1 | 79.0 | 160.6 |
| 160 | 64.1 | 69.6 | 71.0 | 71.7 | 73.5 | 75.5 | 76.7 | 78.7 | 83.6 | 83.9 | 83.7 | 82.5 | 77.8 | 160.4 |
| 200 | 65.7 | 68.0 | 69.9 | 71.7 | 73.2 | 75.5 | 77.0 | 78.7 | 83.6 | 83.9 | 82.2 | 82.0 | 76.9 | 160.2 |
| 250 | 64.8 | 68.6 | 70.3 | 70.8 | 71.9 | 74.1 | 75.9 | 78.6 | 83.4 | 83.5 | 80.4 | 80.1 | 74.6 | 159.5 |
| 315 | 64.0 | 67.6 | 69.6 | 71.4 | 72.7 | 74.7 | 76.5 | 78.4 | 82.8 | 83.0 | 79.4 | 79.2 | 73.2 | 159.3 |
| 400 | 63.8 | 67.5 | 69.0 | 70.9 | 71.9 | 74.4 | 76.2 | 78.6 | 82.9 | 80.6 | 78.6 | 77.8 | 70.9 | 158.8 |
| 500 | 63.1 | 66.1 | 68.2 | 69.6 | 70.9 | 73.7 | 75.1 | 77.3 | 81.3 | 78.7 | 76.7 | 74.9 | 68.4 | 157.5 |
| 630 | 61.9 | 65.2 | 67.4 | 68.8 | 70.7 | 73.4 | 74.7 | 77.1 | 80.1 | 78.4 | 75.2 | 73.7 | 66.9 | 157.2 |
| 800 | 60.3 | 64.6 | 66.8 | 68.2 | 70.6 | 73.1 | 74.4 | 75.7 | 79.2 | 76.7 | 73.8 | 72.3 | 66.0 | 156.7 |
| 1000 | 59.2 | 63.8 | 65.5 | 67.2 | 69.8 | 71.9 | 73.0 | 74.8 | 77.9 | 75.0 | 72.0 | 70.8 | 64.1 | 156.1 |
| 1250 | 56.8 | 61.8 | 64.9 | 66.3 | 70.0 | 72.4 | 72.3 | 74.0 | 76.0 | 73.3 | 70.1 | 69.0 | 61.5 | 155.6 |
| 1600 | 53.2 | 60.0 | 62.7 | 65.3 | 68.2 | 69.9 | 70.6 | 72.0 | 73.2 | 70.9 | 67.1 | 65.4 | 57.5 | 154.5 |
| 2000 | 50.2 | 58.0 | 61.6 | 63.8 | 67.5 | 69.5 | 69.8 | 69.8 | 70.6 | 68.5 | 63.8 | 62.1 | 52.6 | 154.1 |
| 2500 | 43.4 | 54.4 | 57.3 | 60.9 | 65.6 | 67.7 | 65.6 | 66.3 | 67.1 | 64.2 | 58.9 | 56.2 | 44.1 | 153.2 |
| 3150 | 38.8 | 47.7 | 53.4 | 56.2 | 61.3 | 63.0 | 60.5 | 60.0 | 62.4 | 58.0 | 52.0 | 46.8 | 33.4 | 152.1 |
| 4000 | 30.9 | 39.8 | 46.6 | 51.7 | 53.5 | 55.0 | 54.6 | 53.7 | 54.6 | 51.0 | 43.8 | 33.2 | 13.5 | 151.7 |
| 5000 | 17.1 | 27.2 | 35.3 | 40.5 | 46.8 | 48.3 | 44.3 | 43.1 | 43.1 | 37.7 | 28.2 | 14.0 | 151.1 | |
| 6300 | | 6.8 | 16.6 | 23.8 | 28.7 | 30.5 | 29.2 | 25.4 | 26.2 | 17.2 | 4.0 | | 149.1 | |
| 8000 | | | | | 2.4 | 4.4 | 5.1 | | | | | | 148.2 | |
| 10000 | | | | | | | | | | | | | 147.9 | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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OF POOR QUALITY

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| OASPL | 75.2 | 78.6 | 80.7 | 81.8 | 85.3 | 85.8 | 87.1 | 89.0 | 93.6 | 94.6 | 94.4 | 94.0 | 88.9 | 171.9 |
| PNL | 78.5 | 83.1 | 85.6 | 87.6 | 90.8 | 92.6 | 92.7 | 94.5 | 98.4 | 97.6 | 95.3 | 94.5 | 88.4 | |
| PNLT | 78.5 | 83.1 | 85.6 | 87.6 | 92.0 | 93.9 | 92.7 | 94.5 | 98.4 | 97.6 | 95.3 | 94.5 | 89.5 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-20-78 TAPE NO. N294 TAMB 28.04
LOCATION C41 ANECH CH AERO. RDG. ADH069 PAMB 29.3030 RELHUM 21.00

MODEL TEST POINT 7107 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 0. FREE-JET SPEED M/SEC (0. FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X71080
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ
50
63
80
100
125
160
200

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|
| 250 | 75.2 | 76.3 | 77.7 | 77.7 | 78.9 | 80.4 | 82.5 | 84.1 | 89.4 | 92.4 | 98.5 | 101.7 | 101.1 | 134.9 |
| 315 | 75.9 | 77.2 | 78.1 | 77.8 | 79.6 | 82.2 | 82.5 | 85.1 | 90.9 | 95.4 | 99.6 | 102.6 | 100.0 | 135.5 |
| 400 | 77.7 | 78.2 | 79.1 | 79.0 | 80.3 | 82.8 | 83.9 | 85.6 | 92.3 | 98.5 | 101.9 | 102.6 | 97.0 | 136.5 |
| 500 | 77.3 | 78.4 | 79.5 | 80.2 | 82.9 | 83.9 | 85.1 | 87.1 | 93.4 | 99.6 | 102.7 | 101.2 | 93.1 | 136.7 |
| 630 | 78.1 | 79.8 | 81.4 | 81.1 | 84.6 | 86.0 | 89.0 | 89.1 | 95.1 | 99.7 | 102.1 | 99.0 | 90.4 | 136.4 |
| 800 | 80.4 | 79.4 | 81.9 | 82.7 | 83.3 | 85.9 | 87.1 | 89.8 | 96.6 | 100.5 | 101.6 | 95.8 | 88.9 | 136.2 |
| 1000 | 80.8 | 79.5 | 82.6 | 82.1 | 84.0 | 87.1 | 87.8 | 91.2 | 97.5 | 100.1 | 100.0 | 92.1 | 86.7 | 135.6 |
| 1250 | 79.9 | 82.0 | 83.8 | 83.5 | 84.6 | 87.7 | 88.7 | 92.1 | 97.3 | 99.7 | 99.6 | 91.2 | 85.6 | 135.4 |
| 1600 | 82.1 | 80.9 | 82.4 | 83.7 | 85.0 | 87.9 | 89.6 | 92.8 | 98.2 | 99.4 | 98.6 | 89.7 | 85.3 | 135.4 |
| 2000 | 80.5 | 81.0 | 82.8 | 83.3 | 84.6 | 87.5 | 88.9 | 92.9 | 98.5 | 100.0 | 96.7 | 89.1 | 83.8 | 135.3 |
| 2500 | 80.2 | 81.0 | 83.2 | 83.2 | 84.8 | 87.9 | 89.8 | 92.8 | 98.0 | 98.9 | 95.6 | 89.8 | 82.5 | 134.7 |
| 3150 | 80.5 | 81.6 | 82.3 | 83.8 | 85.3 | 88.8 | 89.7 | 93.6 | 98.8 | 97.3 | 94.9 | 87.8 | 81.8 | 134.6 |
| 4000 | 80.1 | 80.5 | 82.5 | 82.9 | 84.7 | 87.6 | 89.0 | 93.0 | 97.7 | 96.7 | 93.6 | 86.7 | 80.5 | 133.8 |
| 5000 | 80.3 | 80.2 | 82.5 | 82.9 | 84.4 | 87.6 | 89.7 | 93.0 | 96.6 | 96.2 | 92.5 | 85.6 | 79.6 | 133.4 |
| 6300 | 79.4 | 80.6 | 82.3 | 82.5 | 84.8 | 87.9 | 88.8 | 92.1 | 96.0 | 94.8 | 91.5 | 84.7 | 79.2 | 132.8 |
| 8000 | 79.4 | 80.3 | 81.9 | 82.7 | 84.3 | 87.4 | 88.8 | 91.4 | 95.1 | 93.3 | 90.3 | 83.9 | 78.4 | 132.3 |
| 10000 | 78.6 | 80.5 | 81.4 | 82.0 | 84.3 | 87.7 | 87.6 | 90.7 | 94.1 | 92.9 | 89.0 | 83.7 | 78.6 | 132.2 |
| 12500 | 77.0 | 78.9 | 79.6 | 80.6 | 83.4 | 86.0 | 86.2 | 89.1 | 91.3 | 90.6 | 86.8 | 82.0 | 77.5 | 130.9 |
| 16000 | 76.0 | 78.1 | 79.7 | 80.7 | 83.3 | 85.6 | 85.0 | 87.7 | 89.6 | 89.4 | 85.2 | 81.5 | 76.9 | 131.2 |
| 20000 | 71.0 | 76.2 | 77.0 | 78.0 | 82.0 | 84.1 | 81.7 | 84.6 | 86.7 | 86.3 | 81.9 | 79.6 | 75.4 | 130.2 |
| 25000 | 70.6 | 73.0 | 74.8 | 75.3 | 79.7 | 81.0 | 79.1 | 83.8 | 81.6 | 78.4 | 76.1 | 74.2 | 129.2 | |
| 31500 | 69.4 | 69.6 | 72.8 | 74.9 | 74.6 | 75.6 | 76.4 | 79.3 | 79.4 | 76.2 | 70.8 | 67.9 | 128.7 | |
| 40000 | 64.9 | 65.5 | 68.3 | 68.9 | 73.4 | 74.1 | 70.2 | 71.4 | 74.0 | 72.7 | 70.9 | 65.6 | 63.1 | 128.2 |
| 50000 | 58.2 | 59.1 | 61.4 | 63.5 | 65.4 | 66.7 | 65.6 | 64.3 | 68.4 | 65.1 | 63.9 | 60.3 | 57.0 | 125.3 |
| 63000 | 53.7 | 53.2 | 55.3 | 57.7 | 57.2 | 58.9 | 59.9 | 58.3 | 64.7 | 57.4 | 56.9 | 53.8 | 50.6 | 125.4 |
| 80000 | 47.2 | 46.5 | 49.5 | 52.7 | 50.9 | 53.5 | 51.8 | 51.0 | 57.1 | 50.7 | 51.4 | 45.5 | 43.0 | 125.5 |

QASPL 92.2 92.9 94.6 95.0 97.8 99.6 100.6 103.8 108.8 110.5 111.0 109.2 105.3 147.9

TEST DATE 02-27-78 TAPE NO. N299 IALPHA S859 TAMB 29.30
LOCATION C41 ANECH CH AERG. RDG. ADH988 PAMB 29.5700 RELHUM 44.40

MODEL TEST POINT 7100 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CH (23.99 SQ IN) - MODEL 117.65 M/SEC (386.0 FPS)
FREE-JET SPEED

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07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X71090

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. FWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

100.3

100.0

100.3

99.4

101.0

101.6

101.3

103.2

108.6

109.2

109.2

107.7

106.7

148.1

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MODEL/FULL SIZE SCALE FACTOR FREE JET VELOCITY (FT/SEC) 386.00 REFRACTION CORRECTION - YES
INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-80 TAPE NO. N299 IALPHA 3859 TAMB 29.30
LOCATION 041 ANECM CH AERO. RDG. ADH988 PAMB 29.5700 RELHUM 44.40

MODEL TEST POINT ACOUSTIC RANGE SIZE FREE-JET SPEED
7100 7108 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.65 M/SEC (386.0 FPS)

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X71081

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 61.4 | 63.0 | 63.7 | 62.6 | 63.9 | 65.1 | 65.1 | 65.5 | 72.0 | 76.7 | 78.4 | 76.2 | 68.3 | 152.5 |
| 63 | 62.4 | 63.4 | 64.3 | 63.6 | 66.8 | 66.3 | 66.0 | 66.5 | 73.8 | 76.9 | 78.0 | 74.8 | 67.5 | 152.3 |
| 80 | 62.8 | 64.2 | 65.1 | 65.0 | 75.8 | 67.0 | 66.9 | 68.3 | 75.6 | 78.0 | 78.0 | 72.7 | 68.5 | 153.1 |
| 100 | 66.2 | 67.8 | 68.5 | 67.1 | 67.1 | 68.4 | 68.0 | 69.1 | 76.8 | 78.0 | 76.9 | 70.1 | 68.6 | 152.7 |
| 125 | 65.7 | 65.1 | 67.4 | 67.5 | 67.8 | 69.8 | 68.7 | 70.5 | 76.6 | 77.6 | 76.4 | 68.9 | 67.0 | 152.3 |
| 160 | 66.0 | 65.1 | 68.0 | 66.8 | 68.4 | 70.3 | 69.8 | 71.4 | 77.5 | 77.2 | 75.3 | 67.2 | 66.3 | 152.4 |
| 200 | 64.8 | 67.4 | 69.0 | 68.2 | 68.9 | 70.5 | 70.6 | 72.0 | 77.9 | 77.8 | 73.2 | 65.2 | 63.9 | 152.6 |
| 250 | 66.6 | 66.1 | 67.5 | 68.2 | 68.5 | 70.2 | 70.0 | 72.1 | 77.5 | 76.9 | 72.2 | 65.8 | 62.4 | 152.2 |
| 315 | 64.6 | 65.9 | 67.7 | 67.7 | 68.6 | 70.6 | 71.0 | 72.1 | 78.6 | 75.5 | 71.7 | 65.0 | 61.5 | 152.5 |
| 400 | 63.8 | 65.4 | 67.9 | 67.5 | 69.2 | 71.5 | 71.1 | 73.2 | 77.8 | 75.2 | 70.5 | 63.7 | 59.6 | 152.6 |
| 500 | 63.6 | 65.7 | 66.7 | 67.9 | 68.7 | 70.6 | 70.7 | 72.9 | 76.8 | 74.4 | 69.1 | 62.1 | 57.9 | 152.3 |
| 630 | 62.7 | 64.3 | 66.7 | 67.0 | 69.1 | 70.9 | 71.7 | 73.0 | 75.9 | 72.8 | 67.7 | 60.7 | 56.5 | 152.1 |
| 800 | 65.0 | 65.8 | 68.2 | 68.1 | 69.2 | 71.0 | 70.8 | 71.9 | 74.9 | 71.1 | 66.2 | 59.3 | 54.7 | 152.0 |
| 1000 | 63.5 | 65.8 | 67.7 | 67.4 | 68.6 | 70.4 | 70.4 | 71.1 | 73.8 | 70.6 | 64.6 | 58.6 | 54.0 | 151.9 |
| 1250 | 62.8 | 65.0 | 66.9 | 67.3 | 68.5 | 70.5 | 69.1 | 70.2 | 71.9 | 69.3 | 63.5 | 58.3 | 54.5 | 151.8 |
| 1600 | 60.8 | 64.3 | 65.7 | 65.9 | 67.3 | 68.6 | 67.9 | 69.0 | 70.6 | 68.4 | 62.1 | 57.3 | 52.2 | 151.9 |
| 2000 | 57.7 | 61.6 | 62.9 | 63.8 | 67.1 | 68.0 | 66.8 | 67.5 | 68.4 | 65.8 | 58.9 | 54.8 | 48.3 | 151.8 |
| 2500 | 54.5 | 59.2 | 61.8 | 62.8 | 65.2 | 66.0 | 62.8 | 64.1 | 64.1 | 59.1 | 52.3 | 46.7 | 40.0 | 150.9 |
| 3150 | 45.6 | 54.2 | 56.6 | 58.0 | 61.5 | 61.6 | 58.1 | 57.1 | 59.2 | 56.1 | 48.9 | 39.2 | 28.6 | 150.4 |
| 4000 | 38.2 | 45.6 | 49.8 | 51.2 | 52.9 | 53.4 | 52.2 | 50.8 | 51.7 | 46.5 | 39.1 | 25.4 | 10.2 | 149.6 |
| 5000 | 23.7 | 31.5 | 39.1 | 43.4 | 47.2 | 46.9 | 41.9 | 41.0 | 41.3 | 31.9 | 22.8 | 7.8 | | 149.7 |
| 6300 | 3.7 | 15.0 | 23.7 | 27.4 | 29.2 | 29.7 | 27.3 | 23.1 | 25.4 | 10.8 | | | | 148.8 |
| 8000 | | | | 1.8 | 2.3 | 4.1 | 3.4 | | | | | | | 147.4 |
| 10000 | | | | | | | | | | | | | | 145.7 |

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|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| OASPL | 76.4 | 77.7 | 79.4 | 79.3 | 81.7 | 82.2 | 81.8 | 83.3 | 88.2 | 87.8 | 86.1 | 81.2 | 76.5 | 165.4 |
| PNL | 81.6 | 84.5 | 86.4 | 86.9 | 89.0 | 90.0 | 89.0 | 90.0 | 93.5 | 91.5 | 87.2 | 80.4 | 76.1 | |
| PNLT | 81.6 | 85.0 | 86.4 | 87.4 | 90.4 | 91.3 | 89.5 | 90.0 | 93.5 | 91.5 | 87.2 | 80.4 | 76.1 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMS 29.30
LOCATION C41 ANECH CH AERO. RDG. ADH988 PAMB 29.5700 RELHUM 44.40

MODEL TEST POINT 7108 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.65 M/SEC (386.0 FPS) FREE-JET SPEED

08/30/79 19.452

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 40.0 FT. ARCIDENTIFICATION - MODEL FJ-ZER-FMODL X71090
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 67.0 | 92.1 | 91.1 | 91.1 | 92.2 | 94.3 | 96.7 | 98.6 | 103.8 | 108.6 | 112.8 | 116.2 | 115.9 | 149.4 |
| 315 | 88.4 | 90.9 | 90.9 | 91.5 | 93.6 | 96.2 | 96.3 | 98.7 | 105.9 | 111.0 | 115.1 | 118.1 | 116.0 | 151.1 |
| 400 | 90.2 | 92.4 | 92.7 | 92.2 | 93.6 | 95.7 | 96.8 | 99.5 | 107.5 | 115.0 | 117.7 | 119.1 | 116.3 | 152.9 |
| 500 | 91.2 | 93.5 | 94.3 | 94.1 | 94.9 | 97.0 | 98.4 | 100.6 | 108.5 | 116.1 | 119.2 | 119.9 | 117.1 | 154.0 |
| 630 | 92.3 | 94.6 | 94.9 | 94.9 | 97.3 | 98.1 | 99.3 | 102.4 | 110.1 | 116.5 | 120.1 | 120.8 | 117.9 | 154.9 |
| 800 | 96.4 | 95.4 | 96.2 | 96.7 | 97.1 | 99.9 | 100.6 | 104.7 | 111.9 | 117.3 | 121.4 | 121.1 | 118.0 | 155.7 |
| 1000 | 99.7 | 101.0 | 100.5 | 98.8 | 98.9 | 101.0 | 102.4 | 105.1 | 113.0 | 116.9 | 120.5 | 120.9 | 118.1 | 155.4 |
| 1250 | 98.6 | 100.9 | 101.1 | 100.9 | 101.3 | 103.1 | 103.3 | 106.4 | 113.3 | 116.0 | 121.3 | 121.0 | 117.2 | 155.6 |
| 1600 | 98.9 | 98.3 | 98.6 | 99.1 | 100.7 | 102.3 | 103.9 | 107.1 | 114.2 | 116.6 | 121.1 | 119.6 | 115.6 | 155.3 |
| 2000 | 99.6 | 101.1 | 100.2 | 99.4 | 100.2 | 101.4 | 103.5 | 107.2 | 114.6 | 117.0 | 120.0 | 117.4 | 113.7 | 154.5 |
| 2500 | 100.8 | 101.3 | 100.3 | 100.6 | 100.4 | 102.0 | 104.4 | 107.9 | 114.7 | 117.2 | 119.6 | 116.8 | 111.6 | 154.2 |
| 3150 | 102.6 | 104.1 | 102.2 | 100.9 | 101.2 | 103.1 | 104.5 | 108.7 | 115.6 | 116.8 | 117.9 | 114.6 | 110.1 | 153.7 |
| 4000 | 103.2 | 104.5 | 104.0 | 102.0 | 101.6 | 102.9 | 104.3 | 108.0 | 114.2 | 115.9 | 116.6 | 113.0 | 108.2 | 152.8 |
| 5000 | 102.3 | 104.6 | 104.2 | 104.1 | 103.0 | 103.6 | 104.7 | 108.4 | 114.1 | 115.8 | 115.7 | 111.6 | 106.8 | 152.6 |
| 6300 | 100.3 | 103.4 | 104.0 | 103.9 | 104.2 | 105.5 | 105.5 | 107.9 | 113.4 | 115.3 | 114.6 | 110.2 | 106.3 | 152.3 |
| 8000 | 99.9 | 103.8 | 103.7 | 103.6 | 104.9 | 105.5 | 105.3 | 107.7 | 111.9 | 113.8 | 113.0 | 108.4 | 105.2 | 151.5 |
| 10000 | 98.3 | 102.7 | 104.4 | 103.7 | 104.8 | 106.7 | 105.6 | 107.9 | 111.0 | 112.5 | 111.4 | 108.2 | 103.6 | 151.4 |
| 12500 | 95.4 | 101.0 | 102.5 | 103.3 | 104.3 | 105.0 | 104.7 | 106.3 | 108.5 | 110.2 | 109.2 | 105.5 | 102.4 | 150.3 |
| 16000 | 93.7 | 99.9 | 101.5 | 102.3 | 104.5 | 105.0 | 102.3 | 104.8 | 107.0 | 108.7 | 106.8 | 103.4 | 100.8 | 150.4 |
| 20000 | 88.6 | 96.7 | 97.8 | 99.4 | 102.9 | 104.2 | 100.9 | 102.0 | 104.1 | 105.1 | 104.0 | 100.3 | 98.8 | 149.6 |
| 25000 | 87.2 | 92.3 | 94.8 | 95.2 | 99.5 | 100.4 | 98.0 | 97.0 | 101.3 | 100.4 | 99.5 | 96.7 | 96.0 | 148.2 |
| 31500 | 85.0 | 88.6 | 92.6 | 93.4 | 94.2 | 94.5 | 94.2 | 94.2 | 96.9 | 99.4 | 96.5 | 91.0 | 90.0 | 147.7 |
| 40000 | 80.2 | 83.5 | 87.0 | 88.0 | 92.2 | 92.2 | 88.5 | 89.5 | 92.0 | 94.4 | 91.4 | 85.5 | 85.9 | 147.3 |
| 50000 | 72.8 | 76.6 | 79.4 | 81.3 | 83.5 | 85.0 | 83.7 | 82.7 | 87.9 | 87.6 | 85.2 | 80.9 | 79.6 | 145.3 |
| 63000 | 67.2 | 70.9 | 73.3 | 75.4 | 75.9 | 76.5 | 78.7 | 76.8 | 83.9 | 81.2 | 79.7 | 75.2 | 74.2 | 144.9 |
| 80000 | 61.2 | 64.5 | 68.3 | 70.2 | 69.7 | 71.6 | 71.6 | 71.8 | 78.2 | 76.5 | 74.9 | 68.9 | 67.1 | 146.2 |
| GASPL | 111.6 | 114.0 | 114.0 | 113.8 | 114.7 | 116.0 | 116.2 | 119.1 | 125.1 | 128.1 | 130.9 | 130.3 | 127.2 | 166.6 |

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| TEST DATE | 02-21-78 | TAPE NO. | N294 | ALPHA | SB59 | TAMB | 23.00 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERG. RDG. | ASH087 | PAMB | 29.3650 | RELHUM | 46.00 |

| MODEL | TEST POINT | ACQUSTIC RANGE | 12.2 M | 40.0 FT | ARC | 154.7 SQ CH | 23.99 SQ IN | MODEL | 0. | FREE-JET SPEED | 0. | M/SEC | 0. | FPS |
|-------|------------|----------------|--------|---------|-----|-------------|-------------|-------|----|----------------|----|-------|----|-----|
| 7100 | 7109 | | | | | | | | | | | | | |

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X71090

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 87.0 | 92.1 | 91.1 | 91.1 | 92.2 | 94.3 | 96.7 | 98.6 | 103.6 | 108.6 | 112.6 | 116.2 | 115.9 | 149.4 |
| 315 | 86.4 | 90.9 | 90.9 | 91.5 | 93.6 | 96.2 | 98.3 | 98.7 | 105.9 | 111.0 | 115.1 | 118.1 | 116.0 | 151.1 |
| 400 | 90.2 | 92.4 | 92.7 | 92.2 | 93.6 | 95.7 | 96.8 | 99.5 | 107.5 | 115.0 | 117.7 | 119.1 | 116.3 | 152.9 |
| 500 | 91.2 | 93.5 | 94.3 | 94.1 | 94.9 | 97.0 | 98.4 | 100.6 | 108.5 | 116.1 | 119.2 | 119.9 | 117.1 | 154.0 |
| 630 | 92.3 | 94.6 | 94.9 | 94.9 | 97.3 | 98.1 | 99.3 | 102.4 | 110.1 | 116.5 | 120.1 | 120.8 | 117.9 | 154.9 |
| 800 | 96.4 | 95.4 | 96.2 | 96.7 | 97.1 | 99.9 | 100.6 | 104.7 | 111.9 | 117.3 | 121.4 | 121.1 | 118.0 | 155.7 |
| 1000 | 99.7 | 101.0 | 100.5 | 98.8 | 98.9 | 101.0 | 102.4 | 105.1 | 113.0 | 116.9 | 120.5 | 120.9 | 118.1 | 155.4 |
| 1250 | 96.8 | 100.9 | 101.3 | 103.1 | 103.3 | 103.3 | 106.4 | 113.3 | 116.0 | 121.3 | 121.0 | 117.2 | 155.6 | |
| 1600 | 98.9 | 98.3 | 98.6 | 99.1 | 100.7 | 102.3 | 103.9 | 107.1 | 114.2 | 116.6 | 121.1 | 119.6 | 115.6 | 155.3 |
| 2000 | 99.6 | 101.1 | 100.2 | 99.4 | 100.0 | 101.4 | 103.5 | 107.2 | 114.6 | 117.0 | 120.0 | 117.4 | 113.7 | 154.5 |
| 2500 | 100.8 | 101.3 | 100.3 | 100.6 | 100.4 | 102.0 | 104.4 | 107.9 | 114.7 | 117.2 | 119.6 | 116.8 | 111.6 | 154.2 |
| 3150 | 102.8 | 104.1 | 102.2 | 100.9 | 101.2 | 103.1 | 104.5 | 108.7 | 115.6 | 116.8 | 117.9 | 114.6 | 110.1 | 153.7 |
| 4000 | 103.2 | 104.5 | 104.0 | 102.0 | 101.6 | 102.9 | 104.3 | 108.0 | 114.2 | 115.9 | 116.6 | 113.0 | 108.2 | 152.8 |
| 5000 | 102.3 | 104.6 | 104.2 | 104.1 | 103.0 | 103.8 | 104.7 | 108.4 | 114.1 | 115.8 | 116.7 | 111.6 | 106.8 | 152.6 |
| 6300 | 100.3 | 103.4 | 104.0 | 103.9 | 104.2 | 105.5 | 105.5 | 107.9 | 113.4 | 115.3 | 114.6 | 110.2 | 106.3 | 152.3 |
| 8000 | 99.9 | 103.8 | 103.7 | 103.6 | 104.9 | 105.5 | 105.3 | 107.7 | 111.9 | 113.8 | 113.0 | 108.4 | 105.2 | 151.5 |
| 10000 | 98.3 | 102.7 | 104.4 | 103.7 | 104.8 | 106.7 | 105.6 | 107.9 | 111.0 | 112.5 | 111.4 | 108.2 | 103.6 | 151.4 |
| 12500 | 95.4 | 101.0 | 102.5 | 103.3 | 104.3 | 105.0 | 104.7 | 106.3 | 108.5 | 110.2 | 109.2 | 105.5 | 102.4 | 150.3 |
| 16000 | 93.7 | 99.9 | 101.5 | 102.3 | 104.5 | 105.0 | 102.7 | 104.8 | 107.0 | 108.7 | 105.8 | 103.4 | 100.8 | 150.4 |
| 20000 | 88.6 | 96.7 | 97.8 | 99.4 | 102.9 | 104.2 | 100.9 | 102.0 | 104.1 | 105.1 | 104.0 | 100.3 | 98.8 | 149.6 |
| 25000 | 87.2 | 92.3 | 94.8 | 95.2 | 99.5 | 100.4 | 98.0 | 97.0 | 101.3 | 100.4 | 99.5 | 96.7 | 96.0 | 148.2 |
| 31500 | 85.0 | 88.6 | 92.6 | 93.4 | 94.2 | 94.5 | 94.2 | 96.9 | 99.4 | 96.5 | 91.0 | 90.0 | 147.7 | |
| 40000 | 80.2 | 83.5 | 87.0 | 88.0 | 92.2 | 92.2 | 88.5 | 89.5 | 92.0 | 94.4 | 91.4 | 85.5 | 85.9 | 147.3 |
| 50000 | 72.8 | 76.6 | 79.4 | 81.3 | 83.5 | 85.0 | 83.7 | 82.7 | 87.9 | 87.6 | 85.2 | 80.9 | 79.6 | 145.3 |
| 63000 | 67.2 | 70.9 | 73.3 | 75.4 | 75.8 | 76.5 | 78.7 | 76.6 | 83.9 | 81.2 | 79.7 | 75.2 | 74.2 | 144.9 |
| 80000 | 61.2 | 64.5 | 68.3 | 70.2 | 69.7 | 71.6 | 71.6 | 71.8 | 78.2 | 76.5 | 74.9 | 68.9 | 67.1 | 146.2 |
| QASPL | 111.6 | 114.0 | 114.0 | 113.8 | 114.7 | 116.0 | 116.2 | 119.1 | 125.1 | 128.1 | 130.9 | 130.3 | 127.2 | 166.6 |

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) FREE JET DIAMETER (IN) 0. 48.00 REFRACTION CORRECTION - YES TURBULANCE CORRECTION - YES

TEST DATE 02-21-78 LOCATION C41 ANECH CH TAPE NO. N294 AERG. RDG. ASH087 IALPHA SB59 PAMB 29.3650 TAMB 23.00 RELHUM 46.00

MODEL TEST POINT 7109 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL SIZE 0. FREE-JET SPEED 0. M/SEC (0. FPS)

08/30/79 19.452

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X71091

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 66.4 | 72.2 | 73.5 | 73.8 | 75.5 | 77.8 | 78.8 | 81.0 | 88.3 | 94.8 | 95.9 | 95.1 | 88.9 | 170.8 |
| 63 | 69.4 | 73.3 | 75.1 | 75.6 | 76.9 | 79.1 | 80.3 | 82.1 | 89.3 | 95.8 | 97.4 | 95.9 | 89.7 | 171.7 |
| 80 | 70.5 | 74.3 | 75.7 | 76.4 | 79.2 | 80.2 | 81.2 | 83.9 | 90.9 | 96.2 | 98.2 | 96.7 | 90.5 | 172.5 |
| 100 | 74.4 | 75.0 | 76.9 | 78.2 | 78.9 | 81.9 | 82.4 | 86.2 | 92.6 | 96.9 | 99.4 | 96.9 | 90.3 | 173.3 |
| 125 | 77.7 | 80.5 | 81.2 | 80.2 | 80.7 | 82.9 | 84.2 | 86.4 | 93.7 | 96.4 | 98.4 | 96.6 | 90.2 | 173.1 |
| 160 | 74.6 | 80.2 | 81.6 | 82.2 | 82.9 | 84.9 | 84.9 | 87.7 | 93.8 | 95.3 | 99.1 | 96.4 | 88.9 | 173.3 |
| 200 | 76.4 | 77.5 | 78.9 | 80.2 | 82.2 | 83.9 | 85.4 | 88.2 | 94.5 | 95.8 | 98.6 | 94.7 | 86.9 | 172.9 |
| 250 | 76.8 | 80.0 | 80.2 | 80.3 | 81.3 | 82.8 | 84.8 | 88.0 | 94.6 | 95.9 | 97.1 | 92.1 | 84.3 | 172.1 |
| 315 | 77.5 | 79.9 | 80.1 | 81.2 | 81.5 | 83.2 | 85.5 | 88.4 | 94.5 | 95.8 | 96.4 | 89.9 | 81.4 | 171.9 |
| 400 | 79.1 | 82.3 | 81.6 | 81.2 | 82.0 | 84.0 | 85.2 | 88.9 | 95.0 | 94.9 | 94.2 | 88.1 | 79.0 | 171.4 |
| 500 | 79.0 | 82.3 | 83.1 | 82.0 | 82.0 | 83.6 | 84.8 | 88.0 | 93.3 | 93.7 | 92.3 | 85.8 | 76.1 | 170.4 |
| 630 | 77.6 | 82.0 | 82.9 | 83.8 | 83.1 | 84.2 | 84.9 | 88.1 | 92.8 | 93.2 | 91.0 | 83.7 | 73.6 | 170.3 |
| 800 | 75.1 | 80.4 | 82.4 | 83.3 | 84.1 | 85.7 | 85.4 | 87.3 | 91.8 | 92.3 | 89.4 | 81.6 | 72.0 | 170.0 |
| 1000 | 74.3 | 80.5 | 81.9 | 82.8 | 84.7 | 85.5 | 85.1 | 86.9 | 90.1 | 90.4 | 87.4 | 79.2 | 69.7 | 169.2 |
| 1250 | 72.2 | 79.0 | 82.4 | 82.8 | 84.5 | 86.6 | 85.3 | 87.0 | 89.0 | 88.9 | 85.3 | 78.2 | 66.7 | 169.1 |
| 1600 | 68.4 | 76.8 | 80.0 | 82.0 | 83.7 | 84.6 | 84.1 | 85.0 | 86.0 | 86.0 | 82.1 | 74.1 | 63.1 | 168.0 |
| 2000 | 65.7 | 75.1 | 78.7 | 80.8 | 83.7 | 84.4 | 81.9 | 83.3 | 84.2 | 83.3 | 78.3 | 70.3 | 58.5 | 168.0 |
| 2500 | 58.9 | 70.7 | 74.1 | 77.2 | 81.6 | 83.2 | 79.6 | 79.8 | 80.4 | 79.0 | 74.2 | 64.4 | 51.5 | 167.2 |
| 3150 | 54.1 | 63.8 | 69.3 | 71.4 | 76.8 | 78.0 | 75.2 | 73.2 | 75.8 | 71.9 | 66.3 | 55.8 | 40.4 | 165.8 |
| 4000 | 45.6 | 55.4 | 63.2 | 66.4 | 68.5 | 69.2 | 68.5 | 67.2 | 67.5 | 66.2 | 57.1 | 41.2 | 19.9 | 165.4 |
| 5000 | 31.1 | 42.7 | 51.4 | 55.6 | 61.5 | 62.1 | 57.8 | 57.1 | 56.4 | 53.6 | 42.2 | 22.0 | | 165.0 |
| 6300 | 5.9 | 21.6 | 31.7 | 38.1 | 42.7 | 45.0 | 42.9 | 39.4 | 40.2 | 32.6 | 10.3 | | | 163.0 |
| 8000 | | | 4.3 | 13.0 | 16.9 | 18.7 | 19.8 | 14.1 | 14.9 | 1.3 | | | | 162.6 |
| 10000 | | | | | | | | | | | | | | 163.9 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GASPL 87.7 91.7 92.9 93.5 94.8 96.4 96.8 99.1 104.7 106.7 108.1 105.1 98.3 184.1
 PNL 93.0 98.0 100.6 102.1 104.3 105.8 104.5 106.2 110.4 111.0 110.7 105.9 97.8
 PNLT 94.2 98.0 100.6 102.1 105.7 106.9 104.5 106.2 110.9 111.6 111.7 105.9 98.9

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-21-78 TAPE NO. N294 ALPHA SB59 TAMB 23.00
 LOCATION C41 ANECH CH AERO. RDG. ASH087 PAMB 29.3650 RELHUM 46.00

MODEL TEST POINT ACoustic RANGE SIZE FREE-JET SPEED
 7100 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X71100-
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. FWL

FREQ

50

63

80

100

125

160

200

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 83.9 | 86.6 | 86.7 | 88.0 | 88.8 | 90.2 | 92.9 | 95.3 | 98.0 | 106.4 | 110.3 | 113.5 | 112.4 | 146.4 |
| 315 | 85.3 | 88.1 | 87.3 | 87.4 | 89.2 | 91.4 | 92.8 | 94.7 | 99.6 | 107.5 | 111.9 | 114.8 | 111.7 | 147.5 |
| 400 | 86.9 | 87.9 | 88.5 | 88.7 | 89.8 | 91.9 | 93.8 | 96.2 | 100.9 | 111.3 | 114.7 | 115.1 | 109.5 | 149.0 |
| 500 | 88.9 | 88.0 | 89.9 | 89.8 | 91.6 | 93.0 | 94.6 | 97.3 | 102.8 | 112.6 | 116.2 | 114.7 | 106.6 | 149.8 |
| 630 | 88.3 | 89.3 | 90.8 | 90.9 | 96.2 | 94.9 | 96.5 | 99.4 | 105.1 | 112.9 | 116.1 | 113.5 | 103.2 | 149.6 |
| 800 | 90.8 | 88.9 | 91.4 | 92.7 | 93.3 | 95.6 | 97.8 | 101.2 | 107.1 | 113.2 | 116.1 | 111.5 | 100.2 | 149.5 |
| 1000 | 91.7 | 90.7 | 93.2 | 93.0 | 94.1 | 96.7 | 98.6 | 102.0 | 108.2 | 113.3 | 114.4 | 107.9 | 98.0 | 148.7 |
| 1250 | 91.0 | 92.8 | 94.8 | 94.4 | 95.4 | 98.1 | 99.2 | 103.6 | 108.6 | 112.9 | 114.0 | 106.7 | 97.1 | 148.5 |
| 1600 | 94.1 | 92.7 | 94.7 | 95.0 | 96.3 | 98.9 | 100.6 | 104.2 | 110.0 | 113.3 | 114.0 | 104.7 | 96.5 | 148.9 |
| 2000 | 97.3 | 96.3 | 96.5 | 96.6 | 96.6 | 98.0 | 100.4 | 105.1 | 110.5 | 113.6 | 114.3 | 104.5 | 97.6 | 149.3 |
| 2500 | 100.4 | 99.9 | 99.4 | 97.2 | 97.5 | 98.9 | 101.8 | 106.2 | 110.9 | 114.8 | 112.2 | 104.9 | 97.4 | 149.5 |
| 3150 | 104.2 | 104.0 | 102.7 | 101.5 | 99.8 | 100.2 | 102.1 | 106.5 | 111.2 | 114.1 | 113.0 | 106.2 | 98.0 | 150.0 |
| 4000 | 103.6 | 103.6 | 105.4 | 103.6 | 101.7 | 101.3 | 102.5 | 107.1 | 111.4 | 114.5 | 112.9 | 105.8 | 97.8 | 150.4 |
| 5000 | 102.0 | 102.6 | 103.6 | 104.9 | 104.2 | 103.8 | 104.2 | 107.6 | 110.9 | 114.5 | 112.4 | 105.8 | 98.3 | 150.6 |
| 6300 | 101.2 | 102.1 | 103.9 | 103.8 | 104.3 | 105.4 | 105.4 | 107.8 | 111.2 | 113.8 | 111.8 | 105.1 | 97.7 | 150.6 |
| 8000 | 100.9 | 102.6 | 103.0 | 103.8 | 104.8 | 106.2 | 105.3 | 107.4 | 111.4 | 112.8 | 110.3 | 103.6 | 96.9 | 150.5 |
| 10000 | 100.6 | 102.1 | 103.5 | 103.8 | 105.1 | 107.0 | 106.1 | 107.7 | 110.1 | 112.0 | 108.8 | 103.0 | 96.1 | 150.6 |
| 12500 | 98.2 | 100.6 | 102.0 | 103.0 | 105.0 | 105.4 | 105.1 | 106.8 | 108.4 | 110.2 | 107.2 | 101.1 | 95.0 | 150.1 |
| 16000 | 97.1 | 99.2 | 101.3 | 102.2 | 105.1 | 105.5 | 104.3 | 106.2 | 107.1 | 109.3 | 105.3 | 99.9 | 94.3 | 150.6 |
| 20000 | 91.7 | 96.6 | 97.7 | 99.6 | 103.5 | 104.5 | 102.3 | 103.7 | 105.4 | 106.3 | 101.8 | 97.3 | 92.5 | 150.1 |
| 25000 | 90.7 | 92.5 | 95.3 | 96.4 | 100.4 | 101.8 | 99.4 | 99.5 | 102.9 | 101.9 | 98.8 | 94.0 | 91.5 | 149.3 |
| 31500 | 89.2 | 89.2 | 93.0 | 94.9 | 95.3 | 95.3 | 95.5 | 96.2 | 99.8 | 100.4 | 96.6 | 89.8 | 86.5 | 149.0 |
| 40000 | 84.1 | 84.6 | 87.6 | 88.6 | 93.5 | 93.4 | 91.4 | 94.6 | 94.6 | 90.9 | 84.4 | 81.5 | 148.5 | |
| 50000 | 76.8 | 77.8 | 80.1 | 82.6 | 85.4 | 85.6 | 85.1 | 84.4 | 89.9 | 88.0 | 85.1 | 80.0 | 75.8 | 146.4 |
| 63000 | 71.3 | 71.5 | 73.9 | 76.3 | 77.2 | 78.1 | 79.7 | 78.4 | 85.3 | 81.6 | 78.6 | 74.0 | 70.5 | 145.8 |
| 80000 | 65.6 | 64.7 | 67.9 | 70.9 | 71.0 | 73.1 | 72.2 | 72.8 | 79.4 | 76.6 | 73.5 | 65.1 | 61.7 | 146.8 |

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| GASPL | 111.5 | 112.2 | 113.2 | 113.4 | 114.4 | 115.3 | 115.2 | 118.0 | 121.9 | 125.6 | 126.1 | 122.8 | 117.5 | 163.4 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|

GASPL 111.5 112.2 113.2 113.4 114.4 115.3 115.2 118.0 121.9 125.6 126.1 122.8 117.5 163.4

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 39.00
LOCATION C41 ANECH CH AERO. RDG. ADH12 PAMB 29.3300 RELHUM 54.00

MODEL TEST POINT 7110 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 118.57 M/SEC (389.0 FPS)
FREE-JET SPEED

ORIGINAL PAGE IS
OF POOR QUALITY

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X71100

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 91.1 | 92.6 | 91.3 | 91.1 | 90.4 | 90.2 | 91.0 | 91.8 | 96.3 | 103.2 | 107.1 | 110.5 | 106.2 | 143.6 |
| 315 | 91.1 | 92.6 | 91.3 | 91.1 | 91.0 | 91.6 | 91.4 | 91.9 | 99.1 | 109.0 | 112.2 | 113.6 | 110.6 | 147.2 |
| 400 | 92.7 | 92.3 | 92.1 | 90.7 | 91.4 | 92.1 | 93.0 | 94.5 | 100.6 | 110.0 | 113.8 | 113.8 | 109.3 | 146.0 |
| 500 | 93.3 | 93.4 | 92.9 | 91.7 | 93.5 | 93.3 | 93.7 | 95.2 | 103.1 | 110.5 | 113.9 | 113.4 | 107.8 | 148.1 |
| 630 | 94.4 | 94.2 | 94.8 | 93.1 | 98.1 | 95.2 | 95.5 | 97.2 | 105.4 | 111.1 | 114.4 | 112.6 | 107.3 | 148.4 |
| 800 | 95.7 | 95.6 | 95.7 | 94.3 | 95.2 | 96.1 | 96.8 | 99.0 | 106.8 | 111.5 | 113.2 | 109.9 | 107.4 | 147.8 |
| 1000 | 96.3 | 95.1 | 96.3 | 96.1 | 96.2 | 97.3 | 97.8 | 99.9 | 107.2 | 111.2 | 112.7 | 107.6 | 106.2 | 147.4 |
| 1250 | 96.9 | 96.8 | 98.1 | 96.5 | 97.7 | 98.8 | 98.5 | 101.6 | 108.7 | 111.6 | 112.7 | 106.4 | 105.0 | 147.8 |
| 1600 | 98.4 | 99.1 | 99.8 | 98.0 | 98.7 | 99.9 | 100.1 | 102.4 | 109.6 | 112.3 | 113.4 | 106.6 | 106.5 | 148.6 |
| 2000 | 101.5 | 99.0 | 99.8 | 98.7 | 98.7 | 99.2 | 100.1 | 103.5 | 110.4 | 113.8 | 111.7 | 107.4 | 106.7 | 149.0 |
| 2500 | 102.3 | 100.6 | 100.1 | 99.4 | 98.8 | 100.4 | 101.9 | 105.0 | 111.2 | 113.8 | 113.2 | 109.6 | 108.5 | 149.9 |
| 3150 | 106.7 | 105.2 | 103.6 | 100.3 | 102.5 | 102.1 | 102.6 | 105.7 | 112.0 | 114.7 | 113.5 | 109.3 | 108.1 | 150.9 |
| 4000 | 110.7 | 109.6 | 107.3 | 104.9 | 104.7 | 103.7 | 103.5 | 106.9 | 111.7 | 114.9 | 113.1 | 109.5 | 108.9 | 151.8 |
| 5000 | 109.0 | 108.5 | 109.5 | 107.1 | 108.1 | 106.8 | 105.7 | 107.7 | 112.1 | 114.2 | 112.5 | 108.7 | 108.1 | 152.2 |
| 6300 | 108.7 | 108.8 | 109.1 | 109.5 | 108.3 | 108.4 | 106.9 | 107.9 | 112.5 | 113.4 | 111.2 | 107.4 | 107.5 | 152.4 |
| 8000 | 108.3 | 108.5 | 109.4 | 108.4 | 108.8 | 109.2 | 106.9 | 107.5 | 111.5 | 112.9 | 110.0 | 107.2 | 107.2 | 152.4 |
| 10000 | 107.8 | 108.8 | 108.3 | 108.2 | 109.1 | 110.0 | 107.9 | 108.1 | 110.4 | 111.8 | 109.2 | 106.3 | 107.7 | 152.7 |
| 12500 | 107.2 | 108.0 | 108.6 | 108.0 | 109.0 | 108.4 | 107.1 | 107.4 | 110.1 | 111.8 | 108.4 | 106.4 | 108.4 | 153.1 |
| 16000 | 104.3 | 106.0 | 106.6 | 106.6 | 109.6 | 108.5 | 106.5 | 107.2 | 109.4 | 110.1 | 106.3 | 105.3 | 108.1 | 153.5 |
| 20000 | 105.5 | 106.4 | 107.1 | 106.5 | 108.1 | 107.6 | 104.6 | 105.1 | 108.3 | 107.4 | 104.9 | 103.3 | 107.7 | 154.3 |
| 25000 | 99.5 | 103.2 | 102.9 | 103.3 | 105.0 | 104.8 | 101.8 | 101.4 | 104.5 | 104.8 | 101.4 | 98.0 | 102.4 | 153.1 |
| 31500 | 97.7 | 98.3 | 99.7 | 99.4 | 99.3 | 98.3 | 97.7 | 97.1 | 100.8 | 100.7 | 97.6 | 94.6 | 99.3 | 152.0 |
| 40000 | 92.7 | 92.0 | 94.9 | 95.9 | 98.0 | 96.4 | 92.8 | 92.8 | 96.3 | 94.2 | 91.9 | 90.3 | 93.6 | 151.9 |
| 50000 | 89.9 | 89.2 | 90.8 | 90.3 | 89.9 | 88.6 | 87.4 | 85.7 | 92.6 | 88.8 | 86.4 | 85.3 | 89.3 | 150.8 |
| 63000 | 81.6 | 81.5 | 82.3 | 83.3 | 81.2 | 81.1 | 82.0 | 79.7 | 87.2 | 83.9 | 81.1 | 75.6 | 78.9 | 149.3 |
| 80000 | 72.0 | 71.4 | 73.0 | 74.4 | 75.5 | 76.1 | 74.0 | 73.3 | 77.4 | 74.1 | 71.3 | 65.8 | 69.1 | 147.7 |

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CASPL 118.1 118.2 117.4 118.3 118.0 116.5 117.6 122.5 125.2 125.1 122.7 121.1 165.0

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000
 FREE JET VELOCITY (FT/SEC) 389.00 REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 39.00
 LOCATION C41 ANECH CH AERO. RDG. ADH112 PAMB 29.3300 RELHUM 54.00

MODEL TEST POINT 7110
 12.2 M (40.0 FT) ARC 164.7 SQ CM (23.99 SQ IN) - MODEL 116.57 M/SEC (389.0 FPS)
 ACUSTIC RANGE SIZE
 FREE-JET SPEED

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X71101

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 70.9 | 72.0 | 72.9 | 72.2 | 73.4 | 74.2 | 75.0 | 76.0 | 81.5 | 89.8 | 92.0 | 89.8 | 82.0 | 165.7 |
| 63 | 71.5 | 73.1 | 73.7 | 73.3 | 75.4 | 75.4 | 75.6 | 76.7 | 83.9 | 90.2 | 92.1 | 89.4 | 80.4 | 165.7 |
| 80 | 72.5 | 73.9 | 75.5 | 74.6 | 80.0 | 77.3 | 77.4 | 78.7 | 86.2 | 90.8 | 92.5 | 88.5 | 79.9 | 166.1 |
| 100 | 73.8 | 75.2 | 76.4 | 75.7 | 77.1 | 78.1 | 78.7 | 80.4 | 87.5 | 91.2 | 91.3 | 85.7 | 79.8 | 165.5 |
| 125 | 76.2 | 74.6 | 76.9 | 77.5 | 77.9 | 79.2 | 79.5 | 81.2 | 87.8 | 90.7 | 90.7 | 83.2 | 78.3 | 165.1 |
| 160 | 76.6 | 76.2 | 78.6 | 77.7 | 79.3 | 80.6 | 80.2 | 82.8 | 89.2 | 91.0 | 90.5 | 81.8 | 76.8 | 165.5 |
| 200 | 76.0 | 78.3 | 80.1 | 79.0 | 80.2 | 81.6 | 81.6 | 83.5 | 89.9 | 91.5 | 90.9 | 81.7 | 77.8 | 166.3 |
| 250 | 78.7 | 77.9 | 79.9 | 79.6 | 80.0 | 80.7 | 81.4 | 84.3 | 90.5 | 92.7 | 88.9 | 82.1 | 77.4 | 166.6 |
| 315 | 79.1 | 79.2 | 79.9 | 79.9 | 80.9 | 81.6 | 82.9 | 85.5 | 91.0 | 92.3 | 89.9 | 83.7 | 78.3 | 167.5 |
| 400 | 82.9 | 83.3 | 83.0 | 80.6 | 83.2 | 83.0 | 83.3 | 85.0 | 91.4 | 92.9 | 89.8 | 82.8 | 76.9 | 168.5 |
| 500 | 89.5 | 87.3 | 86.3 | 84.9 | 85.2 | 84.4 | 83.9 | 86.9 | 90.8 | 92.6 | 88.9 | 82.3 | 76.7 | 169.5 |
| 630 | 84.3 | 85.8 | 88.3 | 86.8 | 88.3 | 87.1 | 85.8 | 87.4 | 90.9 | 91.5 | 87.8 | 80.8 | 74.9 | 169.8 |
| 800 | 83.5 | 85.8 | 87.6 | 88.9 | 88.3 | 83.8 | 86.8 | 87.3 | 90.9 | 90.4 | 86.0 | 78.9 | 73.1 | 170.1 |
| 1000 | 82.6 | 85.2 | 87.7 | 87.7 | 88.6 | 88.2 | 86.7 | 86.8 | 89.7 | 89.6 | 84.4 | 77.9 | 71.7 | 170.1 |
| 1250 | 81.6 | 85.2 | 86.3 | 87.3 | 88.6 | 89.8 | 87.8 | 87.1 | 88.4 | 88.2 | 83.1 | 76.3 | 70.8 | 170.4 |
| 1600 | 80.2 | 83.8 | 86.2 | 86.7 | 88.4 | 88.0 | 86.5 | 86.1 | 87.6 | 87.6 | 81.4 | 75.0 | 69.1 | 170.8 |
| 2000 | 76.4 | 81.2 | 83.8 | 85.1 | 88.8 | 88.0 | 85.7 | 85.7 | 86.6 | 85.2 | 78.3 | 72.3 | 65.8 | 171.2 |
| 2500 | 75.8 | 80.3 | 83.4 | 84.4 | 86.7 | 86.5 | 83.3 | 82.9 | 84.6 | 81.3 | 75.1 | 67.4 | 60.5 | 171.9 |
| 3150 | 66.3 | 74.7 | 77.3 | 79.6 | 82.2 | 82.4 | 79.1 | 77.6 | 78.9 | 76.3 | 68.3 | 57.2 | 46.8 | 170.8 |
| 4000 | 58.4 | 65.1 | 70.3 | 72.3 | 73.6 | 73.0 | 72.0 | 70.1 | 71.4 | 67.4 | 58.2 | 44.9 | 29.2 | 169.6 |
| 5000 | 43.5 | 51.2 | 59.3 | 63.5 | 67.3 | 66.3 | 61.9 | 60.4 | 60.7 | 53.4 | 42.7 | 26.8 | 1.6 | 169.6 |
| 6300 | 23.0 | 34.2 | 43.1 | 47.1 | 49.1 | 48.8 | 46.6 | 42.5 | 45.0 | 33.8 | 19.5 | | 168.5 | |
| 8000 | 1.6 | 13.3 | 20.8 | 22.3 | 23.3 | 23.1 | 17.2 | 18.2 | 4.0 | | | | 167.0 | |
| 10000 | | | | | | | | | | | | | 165.4 | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| GASPL | 93.0 | 94.9 | 96.4 | 96.5 | 97.9 | 97.9 | 96.4 | 97.4 | 101.5 | 103.2 | 101.8 | 96.6 | 89.8 | 182.5 |
| PWL | 100.1 | 103.1 | 105.6 | 106.2 | 106.2 | 108.1 | 106.1 | 106.1 | 106.5 | 109.2 | 109.3 | 105.8 | 99.0 | 92.7 |
| PWL | 100.1 | 104.0 | 106.3 | 106.7 | 109.5 | 109.3 | 106.1 | 106.5 | 109.6 | 109.8 | 105.8 | 99.0 | 93.8 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

| | | | | | | | |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | SB59 | TAMB | 39.00 |
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH112 | PAMB | 29.3300 | RELHUM | 54.00 |

| | | | | |
|-------|------------|-------------------------|-------------------------------------|----------------|
| MODEL | TEST POINT | ACOUSTIC RANGE | 9032.2 SQ CM (1400.00 SQ IN) - FULL | FREE-JET SPEED |
| 7100 | 7110 | 731.5 M (2400.0 FT) SL | 118.57 M/SEC (389.0 FPS) | |

07/19/79 18.692

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X71110
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

160

200

250 88.0 93.3 91.6 92.6 93.5 95.3 98.2 99.6 104.6 109.4 114.3 117.7 116.9 150.7
315 89.6 91.7 91.9 92.7 94.8 96.7 97.6 99.7 106.7 112.0 116.1 119.3 117.2 152.2
400 91.9 93.7 94.2 93.3 94.9 96.7 98.4 100.0 107.7 115.8 119.2 120.6 117.5 154.2
500 92.3 94.0 95.1 94.9 96.2 98.3 99.4 101.1 109.1 117.6 120.5 121.7 118.1 155.5
630 93.6 96.2 95.9 95.7 101.1 99.4 101.3 103.7 110.9 118.0 121.6 121.3 118.5 156.0
800 98.7 97.2 97.7 98.0 98.6 100.7 102.3 105.0 112.7 119.3 122.4 122.1 119.5 156.9
1000 101.8 103.3 103.3 101.9 101.0 102.1 103.2 106.4 114.1 118.9 122.8 121.0 117.1 156.7
1250 99.9 103.2 103.5 103.2 104.6 105.2 104.8 107.7 114.4 118.8 123.7 120.6 115.5 157.1
1600 105.0 102.9 101.4 101.2 102.2 104.1 105.7 107.9 115.8 119.0 123.7 118.6 114.6 156.9
2000 105.7 106.0 105.0 103.0 101.6 102.9 104.8 108.0 115.1 120.1 121.5 116.7 112.0 156.0
2500 105.0 105.8 105.9 104.9 104.4 104.3 106.4 108.9 115.5 120.5 120.2 115.8 110.8 155.8
3150 103.5 105.6 105.1 105.1 105.2 106.0 106.7 109.1 115.5 119.2 118.4 114.1 109.3 154.8
4000 102.3 103.9 104.1 103.4 104.4 105.8 106.7 108.9 114.8 118.3 116.9 112.3 108.1 153.2
5000 101.3 103.2 103.7 103.7 104.5 105.6 107.0 109.2 114.3 117.3 116.2 110.9 106.9 153.4
6300 99.5 102.9 103.6 103.4 104.6 106.0 106.9 109.1 113.5 116.5 114.6 109.6 105.8 152.8
8000 98.4 102.2 103.1 103.2 104.8 105.7 106.2 108.6 112.5 115.1 113.1 108.4 104.6 152.1
10000 97.0 101.0 101.9 102.8 105.2 106.3 105.7 108.3 111.1 113.5 111.5 107.6 102.5 151.5
12500 94.2 99.8 100.7 101.6 103.7 104.8 104.3 106.1 108.7 111.2 108.9 104.8 101.8 150.3
16000 92.5 97.9 99.5 100.8 103.3 104.6 103.0 104.8 106.5 109.9 106.4 102.9 100.4 150.2
20000 87.5 95.0 96.0 98.4 102.2 102.8 100.4 101.2 103.8 106.3 103.3 99.8 97.3 149.1
25000 86.3 91.0 93.5 94.4 99.1 99.7 97.5 96.7 101.3 102.1 98.3 95.2 93.3 148.0
31500 85.0 87.5 91.0 92.9 94.0 94.5 93.7 94.2 96.8 98.8 95.7 90.3 90.1 147.3
40000 80.0 82.5 85.7 87.5 91.8 91.5 88.3 89.5 92.2 94.1 90.6 85.3 85.5 146.9
50000 72.6 75.8 78.3 81.1 83.8 84.6 83.5 82.4 86.1 87.8 84.7 81.2 79.4 145.2
63000 66.8 69.9 72.8 74.7 76.1 76.3 78.5 76.4 81.8 84.2 81.8 76.2 73.8 144.9
80000 60.8 63.5 66.8 70.3 70.2 71.4 71.2 71.1 77.7 76.9 74.7 68.4 66.2 146.0

GASPL 113.4 114.9 115.0 114.7 115.9 116.9 117.5 119.8 125.7 130.2 132.4 130.7 127.3 167.7

TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAMB 28.40
LOCATION C41 ANECH CH AERO. RDG. ADH077 PAMB 29.2990 RELHUM 21.60

MODEL TEST POINT 7100 7111 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL SIZE 0. FREE-JET SPEED 0. M/SEC (0. FPS)

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FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X71110

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

160

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 200 | 88.0 | 93.3 | 91.6 | 92.6 | 93.5 | 95.3 | 95.2 | 99.6 | 104.6 | 109.4 | 114.3 | 117.7 | 116.9 | 150.7 |
| 250 | 89.6 | 91.7 | 91.9 | 92.7 | 94.8 | 96.7 | 97.6 | 99.7 | 106.7 | 112.0 | 116.1 | 119.3 | 117.2 | 152.2 |
| 315 | 91.9 | 93.7 | 94.2 | 93.3 | 94.9 | 96.7 | 98.4 | 100.0 | 107.7 | 115.8 | 119.2 | 120.6 | 117.5 | 154.2 |
| 400 | 92.3 | 94.0 | 95.1 | 94.9 | 96.2 | 98.3 | 99.4 | 101.1 | 109.1 | 117.6 | 120.5 | 121.7 | 118.1 | 155.5 |
| 500 | 93.6 | 96.2 | 95.9 | 95.7 | 101.1 | 99.4 | 101.3 | 103.7 | 110.9 | 121.6 | 121.3 | 118.5 | 156.0 | |
| 630 | 98.7 | 97.2 | 97.7 | 98.0 | 98.6 | 100.7 | 102.3 | 105.0 | 112.7 | 119.3 | 122.4 | 122.1 | 118.5 | 156.9 |
| 800 | 101.8 | 103.3 | 103.3 | 101.9 | 101.0 | 102.1 | 103.2 | 106.4 | 114.1 | 118.9 | 122.8 | 121.0 | 117.1 | 156.7 |
| 1000 | 99.9 | 103.2 | 103.5 | 103.2 | 104.6 | 105.2 | 104.8 | 107.7 | 114.4 | 118.8 | 123.7 | 120.6 | 115.5 | 157.1 |
| 1250 | 105.0 | 102.9 | 101.4 | 101.2 | 102.2 | 104.1 | 105.7 | 107.9 | 115.8 | 119.0 | 123.7 | 118.6 | 114.6 | 156.9 |
| 1600 | 105.7 | 106.0 | 105.0 | 103.0 | 101.6 | 102.9 | 104.8 | 108.0 | 115.1 | 120.1 | 121.5 | 116.7 | 112.0 | 156.0 |
| 2000 | 105.0 | 105.9 | 104.9 | 104.7 | 104.3 | 106.4 | 108.9 | 115.5 | 120.5 | 120.2 | 115.8 | 110.8 | 155.8 | |
| 2500 | 103.5 | 105.6 | 105.1 | 105.1 | 105.2 | 106.0 | 106.7 | 109.1 | 115.5 | 119.2 | 118.4 | 114.1 | 109.3 | 154.8 |
| 3150 | 102.3 | 103.9 | 104.1 | 103.4 | 104.4 | 105.8 | 107.7 | 108.9 | 114.8 | 118.3 | 116.9 | 112.3 | 108.1 | 153.9 |
| 4000 | 101.3 | 103.2 | 103.7 | 103.7 | 104.5 | 105.5 | 107.0 | 109.2 | 114.3 | 117.3 | 116.2 | 110.9 | 106.9 | 153.4 |
| 5000 | 99.5 | 102.9 | 103.6 | 103.4 | 104.5 | 106.0 | 106.9 | 109.1 | 113.5 | 116.5 | 114.6 | 109.6 | 105.8 | 152.8 |
| 6300 | 98.4 | 102.2 | 103.1 | 103.2 | 104.8 | 105.7 | 106.2 | 108.6 | 112.5 | 115.1 | 113.1 | 108.4 | 104.6 | 152.1 |
| 8000 | 97.0 | 101.0 | 101.9 | 102.8 | 105.2 | 106.3 | 105.7 | 108.3 | 111.1 | 113.5 | 111.5 | 107.6 | 102.5 | 151.5 |
| 10000 | 94.2 | 99.8 | 100.7 | 101.6 | 103.7 | 104.8 | 104.3 | 106.1 | 108.7 | 111.2 | 108.9 | 104.8 | 101.8 | 150.3 |
| 12500 | 92.5 | 97.9 | 99.5 | 100.8 | 103.3 | 104.6 | 103.0 | 104.8 | 106.5 | 109.9 | 106.4 | 102.9 | 100.4 | 150.2 |
| 16000 | 87.5 | 95.0 | 96.0 | 98.4 | 102.2 | 102.8 | 100.4 | 101.2 | 103.8 | 106.3 | 103.3 | 99.8 | 97.3 | 149.1 |
| 20000 | 86.3 | 91.0 | 93.5 | 94.4 | 99.1 | 99.7 | 97.5 | 96.7 | 101.3 | 102.1 | 98.9 | 96.2 | 95.3 | 148.0 |
| 25000 | 85.0 | 87.5 | 91.0 | 92.9 | 94.0 | 94.5 | 93.7 | 94.2 | 96.8 | 98.8 | 95.7 | 90.3 | 90.1 | 147.3 |
| 31500 | 80.0 | 82.5 | 85.7 | 87.5 | 91.8 | 91.5 | 88.3 | 89.5 | 92.2 | 94.1 | 90.6 | 85.3 | 85.5 | 146.9 |
| 40000 | 72.6 | 75.8 | 78.3 | 81.1 | 83.8 | 84.6 | 83.5 | 82.4 | 88.1 | 87.8 | 84.7 | 81.2 | 79.4 | 145.2 |
| 50000 | 66.8 | 69.9 | 72.8 | 74.7 | 76.1 | 76.3 | 78.5 | 76.4 | 84.2 | 81.8 | 78.7 | 76.2 | 73.8 | 144.9 |
| 63000 | 60.8 | 63.5 | 66.8 | 70.3 | 70.2 | 71.4 | 71.2 | 71.1 | 77.7 | 76.9 | 74.7 | 68.4 | 66.2 | 146.0 |

OASPL 113.4 114.9 115.0 114.7 115.9 116.9 117.5 119.8 125.7 130.2 132.4 130.7 127.3 167.7

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YESTEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAMB 29.40
LOCATION C41 ANECH CH AERO. RDG. ADH077 PAMB 29.2990 RELHUM 21.60

MODEL TEST POINT 7100 7111 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (. 23.99 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

07/19/79 18.662

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB, 2400.0 FT., SL

IDENTIFICATION - FJ-ZER-FMODL X71111

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|-------|------|------|-------|
| 50 | 70.1 | 73.5 | 75.1 | 74.8 | 76.8 | 78.8 | 80.3 | 81.6 | 88.6 | 95.6 | 97.4 | 96.6 | 90.2 | 171.9 |
| 63 | 70.4 | 73.8 | 75.9 | 76.4 | 78.1 | 80.4 | 81.4 | 82.6 | 89.9 | 97.4 | 98.7 | 97.7 | 90.7 | 173.1 |
| 80 | 71.8 | 75.9 | 76.7 | 77.2 | 83.0 | 81.5 | 83.2 | 85.2 | 91.7 | 97.7 | 99.8 | 97.2 | 91.0 | 173.6 |
| 100 | 76.7 | 76.8 | 78.4 | 79.4 | 80.5 | 82.7 | 84.2 | 86.4 | 93.4 | 98.9 | 100.5 | 97.9 | 90.9 | 174.5 |
| 125 | 79.7 | 82.9 | 84.0 | 83.2 | 82.7 | 84.0 | 85.0 | 87.7 | 94.7 | 98.5 | 100.7 | 95.6 | 89.3 | 174.4 |
| 160 | 77.6 | 82.6 | 84.0 | 84.5 | 86.2 | 87.0 | 86.5 | 89.0 | 94.9 | 98.2 | 101.4 | 96.5 | 87.3 | 174.7 |
| 200 | 82.5 | 82.0 | 81.7 | 82.2 | 83.7 | 85.7 | 87.2 | 89.0 | 96.1 | 98.2 | 101.2 | 93.7 | 85.9 | 174.6 |
| 250 | 82.8 | 84.8 | 85.0 | 83.8 | 82.9 | 84.4 | 86.1 | 88.8 | 95.2 | 99.0 | 98.7 | 91.4 | 82.6 | 173.7 |
| 315 | 81.8 | 84.4 | 85.6 | 85.5 | 85.5 | 85.5 | 87.5 | 89.5 | 95.3 | 99.0 | 96.9 | 90.0 | 80.7 | 173.4 |
| 400 | 79.8 | 83.7 | 84.5 | 85.4 | 85.9 | 86.9 | 87.4 | 89.4 | 94.9 | 97.4 | 94.7 | 87.5 | 78.2 | 172.5 |
| 500 | 78.1 | 81.6 | 83.2 | 83.3 | 84.9 | 86.4 | 87.2 | 88.8 | 93.9 | 96.0 | 92.7 | 85.5 | 75.9 | 171.5 |
| 630 | 76.6 | 80.5 | 82.4 | 83.3 | 84.7 | 86.0 | 87.2 | 88.8 | 93.1 | 94.7 | 91.5 | 83.9 | 72.7 | 171.0 |
| 800 | 74.3 | 79.8 | 82.1 | 82.8 | 84.6 | 86.1 | 86.9 | 88.5 | 92.0 | 93.5 | 89.4 | 81.1 | 71.5 | 170.4 |
| 1000 | 72.7 | 78.9 | 81.3 | 82.4 | 84.6 | 85.7 | 86.0 | 87.8 | 90.7 | 91.7 | 87.5 | 78.1 | 59.2 | 169.7 |
| 1250 | 70.8 | 77.3 | 79.9 | 81.9 | 84.8 | 86.2 | 85.4 | 87.3 | 89.1 | 89.9 | 85.4 | 77.6 | 65.6 | 169.2 |
| 1600 | 67.2 | 75.5 | 78.3 | 80.3 | 83.0 | 84.4 | 83.6 | 84.8 | 86.3 | 86.9 | 81.9 | 73.4 | 62.5 | 167.9 |
| 2000 | 64.5 | 73.1 | 76.7 | 79.3 | 82.5 | 84.0 | 82.2 | 83.3 | 83.7 | 85.1 | 78.4 | 65.9 | 58.1 | 167.8 |
| 2500 | 57.7 | 68.9 | 72.3 | 76.2 | 80.8 | 81.7 | 79.1 | 79.1 | 80.1 | 80.2 | 73.5 | 64.6 | 50.1 | 166.8 |
| 3150 | 53.1 | 62.5 | 68.0 | 70.7 | 76.3 | 77.3 | 74.8 | 73.0 | 75.7 | 73.5 | 65.8 | 55.4 | 39.7 | 165.7 |
| 4000 | 45.7 | 54.3 | 61.6 | 65.9 | 68.3 | 69.3 | 68.0 | 67.2 | 67.4 | 65.6 | 56.3 | 40.5 | 20.0 | 165.0 |
| 5000 | 30.9 | 41.7 | 50.1 | 55.0 | 61.1 | 61.3 | 57.6 | 57.1 | 56.6 | 53.3 | 41.5 | 21.8 | | 164.6 |
| 6300 | 5.7 | 20.8 | 30.6 | 37.9 | 43.0 | 44.5 | 42.7 | 39.2 | 40.4 | 32.8 | 17.7 | | | 162.9 |
| 8000 | | | | | | | | | | | | | | 162.6 |
| 10000 | | | | | | | | | | | | | | 163.7 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GASPL 90.1 93.1 94.3 94.6 96.3 97.4 98.0 99.9 105.3 106.9 109.7 105.6 98.4 185.1
PNL 94.4 98.6 100.3 102.0 104.7 105.8 105.2 106.5 110.6 113.2 112.2 103.6 97.4
PNLT 95.5 99.1 100.3 102.0 105.8 106.3 105.2 106.5 111.2 113.8 112.2 105.6 98.5

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-20-78 TAPE NO. N294 ALPHA 5359 TAMB 28.40
LOCATION C41 ANECH CH AERO. RDG. ADH077 PAMB 29.2990 RELHUM 21.60

MODEL TEST POINT 7100 7111 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. FREE-JET SPEED M/SEC (0. FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X71120
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 84.6 | 87.4 | 87.2 | 88.5 | 89.4 | 91.0 | 93.4 | 95.1 | 101.3 | 105.6 | 111.0 | 114.5 | 114.4 | 147.6 |
| 315 | 86.0 | 87.3 | 88.1 | 88.2 | 90.0 | 92.4 | 93.3 | 96.4 | 102.7 | 109.0 | 113.4 | 116.3 | 114.2 | 149.2 |
| 400 | 87.6 | 88.1 | 89.8 | 88.9 | 90.5 | 93.2 | 94.0 | 96.3 | 104.2 | 112.5 | 115.9 | 116.8 | 112.3 | 150.5 |
| 500 | 88.2 | 88.7 | 90.8 | 90.8 | 91.9 | 94.8 | 94.9 | 97.6 | 105.5 | 114.6 | 118.0 | 117.2 | 110.1 | 151.8 |
| 630 | 89.3 | 89.8 | 91.6 | 91.7 | 96.0 | 95.6 | 96.5 | 100.2 | 108.1 | 115.0 | 118.8 | 116.8 | 107.4 | 152.3 |
| 800 | 92.1 | 90.6 | 92.6 | 92.9 | 94.0 | 96.6 | 97.8 | 101.9 | 109.7 | 116.2 | 119.6 | 116.5 | 105.7 | 152.8 |
| 1000 | 93.4 | 92.5 | 94.5 | 94.3 | 95.4 | 98.0 | 99.4 | 103.0 | 111.0 | 115.8 | 119.7 | 113.4 | 103.5 | 152.7 |
| 1250 | 97.3 | 98.1 | 97.6 | 96.9 | 97.5 | 99.6 | 100.2 | 104.4 | 111.8 | 115.0 | 121.1 | 113.0 | 102.9 | 153.4 |
| 1600 | 103.4 | 101.0 | 100.0 | 97.8 | 97.6 | 100.5 | 101.4 | 105.3 | 112.9 | 116.1 | 120.8 | 112.3 | 103.3 | 153.6 |
| 2000 | 102.1 | 102.1 | 103.1 | 101.9 | 99.5 | 100.1 | 101.2 | 105.6 | 113.5 | 117.0 | 120.2 | 112.1 | 103.4 | 153.7 |
| 2500 | 101.5 | 101.8 | 102.6 | 102.8 | 103.9 | 103.0 | 102.9 | 106.8 | 113.7 | 118.4 | 111.3 | 103.0 | 154.0 | |
| 3150 | 100.6 | 101.1 | 101.6 | 102.4 | 102.2 | 105.1 | 104.5 | 107.6 | 114.5 | 117.8 | 117.4 | 109.9 | 102.1 | 153.3 |
| 4000 | 100.7 | 100.5 | 101.6 | 100.8 | 101.9 | 103.5 | 104.9 | 108.0 | 114.2 | 116.7 | 116.1 | 108.2 | 100.5 | 152.5 |
| 5000 | 101.1 | 100.5 | 101.8 | 101.2 | 101.3 | 103.8 | 104.8 | 109.0 | 114.2 | 116.7 | 115.1 | 106.7 | 100.2 | 152.4 |
| 6300 | 99.7 | 100.9 | 101.7 | 101.4 | 102.1 | 104.2 | 104.7 | 108.1 | 114.1 | 115.1 | 113.3 | 105.6 | 99.3 | 151.7 |
| 8000 | 99.7 | 100.4 | 101.5 | 101.6 | 103.2 | 104.6 | 104.6 | 108.0 | 113.7 | 114.4 | 111.8 | 104.0 | 98.2 | 151.5 |
| 10000 | 98.7 | 100.4 | 101.3 | 101.9 | 103.2 | 105.3 | 103.7 | 107.8 | 112.2 | 113.5 | 110.6 | 103.3 | 97.0 | 151.2 |
| 12500 | 97.1 | 99.3 | 100.4 | 100.7 | 102.8 | 104.4 | 103.1 | 106.5 | 109.7 | 111.3 | 108.4 | 101.4 | 95.8 | 150.1 |
| 16000 | 95.9 | 97.7 | 99.8 | 100.3 | 102.5 | 104.7 | 102.7 | 105.3 | 107.8 | 109.6 | 106.1 | 100.3 | 95.0 | 150.2 |
| 20000 | 90.9 | 94.8 | 96.6 | 97.9 | 102.2 | 103.5 | 102.2 | 105.2 | 106.8 | 106.8 | 102.8 | 97.8 | 93.0 | 149.5 |
| 25000 | 89.5 | 91.2 | 94.0 | 93.7 | 98.3 | 100.7 | 97.5 | 98.3 | 102.7 | 101.9 | 99.1 | 94.0 | 91.5 | 148.5 |
| 31500 | 87.5 | 87.7 | 91.7 | 92.8 | 93.5 | 94.8 | 93.5 | 95.0 | 98.2 | 99.6 | 95.8 | 89.8 | 85.8 | 147.8 |
| 40000 | 83.3 | 83.2 | 86.4 | 87.6 | 91.8 | 92.8 | 88.6 | 89.8 | 93.7 | 93.7 | 90.8 | 83.8 | 81.7 | 147.4 |
| 50000 | 76.6 | 76.5 | 79.0 | 80.9 | 83.6 | 84.8 | 83.5 | 82.8 | 89.3 | 87.1 | 84.6 | 79.0 | 75.1 | 145.4 |
| 63000 | 70.3 | 70.1 | 72.7 | 74.5 | 75.4 | 76.5 | 77.6 | 76.2 | 84.4 | 80.9 | 78.1 | 72.5 | 69.3 | 144.6 |
| 80000 | 64.3 | 63.2 | 66.7 | 69.1 | 68.8 | 70.7 | 70.4 | 77.8 | 77.8 | 75.7 | 73.6 | 64.4 | 61.4 | 145.3 |
| GASPL | 111.4 | 111.6 | 112.6 | 112.4 | 113.6 | 115.3 | 115.0 | 118.5 | 124.6 | 128.0 | 130.1 | 125.7 | 120.3 | 165.4 |

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TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 30.20
LOCATION C41 ANECH CH AERO. RDG. ADH989 PAMB 29.5700 RELHUM 44.80

MODEL TEST POINT 7112 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.96 M/SEC (387.0 FPS)
7100

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X75061

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PHL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 55.8 | 57.6 | 57.9 | 58.0 | 58.4 | 59.0 | 59.0 | 58.9 | 63.3 | 68.6 | 68.2 | 62.8 | 62.2 | 143.2 |
| 63 | 56.5 | 58.2 | 58.5 | 58.5 | 59.5 | 60.5 | 59.8 | 60.9 | 65.0 | 69.9 | 68.5 | 61.5 | 62.5 | 144.7 |
| 80 | 60.2 | 63.9 | 60.5 | 60.5 | 61.3 | 61.6 | 60.9 | 61.7 | 66.9 | 70.7 | 68.0 | 60.3 | 63.0 | 150.4 |
| 100 | 61.4 | 62.5 | 64.1 | 61.7 | 63.0 | 62.6 | 62.1 | 63.8 | 69.1 | 70.7 | 66.9 | 58.4 | 64.7 | 145.5 |
| 125 | 60.9 | 60.1 | 61.9 | 62.2 | 62.7 | 63.7 | 63.9 | 65.4 | 69.6 | 71.4 | 67.8 | 58.9 | 64.6 | 146.0 |
| 160 | 60.6 | 60.2 | 62.9 | 62.0 | 64.2 | 64.7 | 65.3 | 66.8 | 70.4 | 70.5 | 67.0 | 58.9 | 63.3 | 146.1 |
| 200 | 60.4 | 62.3 | 63.7 | 63.4 | 64.9 | 65.3 | 65.4 | 67.3 | 70.6 | 70.1 | 65.3 | 57.8 | 62.0 | 146.2 |
| 250 | 62.2 | 61.0 | 63.0 | 63.5 | 64.5 | 64.9 | 65.8 | 67.5 | 70.4 | 70.5 | 64.7 | 57.9 | 62.2 | 146.5 |
| 315 | 61.0 | 61.9 | 63.7 | 63.7 | 65.4 | 65.8 | 66.3 | 67.9 | 70.9 | 69.0 | 64.4 | 58.0 | 60.4 | 146.7 |
| 400 | 62.2 | 62.7 | 64.1 | 64.0 | 66.1 | 66.5 | 67.2 | 68.4 | 69.7 | 68.0 | 63.3 | 56.7 | 58.5 | 146.9 |
| 500 | 61.2 | 62.5 | 64.0 | 63.4 | 65.9 | 66.3 | 66.6 | 68.0 | 69.5 | 67.9 | 62.7 | 56.4 | 57.5 | 147.1 |
| 630 | 60.2 | 60.7 | 63.4 | 63.8 | 66.2 | 66.7 | 67.1 | 68.4 | 69.1 | 67.1 | 61.0 | 51.9 | 56.2 | 147.2 |
| 800 | 58.9 | 60.7 | 62.9 | 64.0 | 66.1 | 66.6 | 66.8 | 67.2 | 68.1 | 65.4 | 59.8 | 53.6 | 53.5 | 146.9 |
| 1000 | 57.8 | 60.3 | 62.7 | 63.4 | 65.9 | 66.9 | 66.0 | 66.2 | 67.2 | 65.9 | 59.3 | 53.7 | 53.4 | 147.1 |
| 1250 | 56.7 | 59.8 | 61.4 | 62.8 | 65.9 | 66.1 | 64.8 | 66.5 | 65.3 | 63.0 | 56.7 | 51.8 | 49.0 | 146.7 |
| 1600 | 57.5 | 60.1 | 62.2 | 62.3 | 65.0 | 63.7 | 62.9 | 62.4 | 60.6 | 52.6 | 47.3 | 46.2 | 146.4 | |
| 2000 | 54.2 | 58.2 | 59.8 | 60.5 | 65.5 | 63.8 | 61.0 | 61.1 | 59.4 | 56.0 | 48.8 | 43.2 | 43.1 | 146.4 |
| 2500 | 51.2 | 56.7 | 58.6 | 59.5 | 64.4 | 62.3 | 58.0 | 57.2 | 56.7 | 51.0 | 43.6 | 37.1 | 37.5 | 146.9 |
| 3150 | 43.3 | 50.7 | 53.7 | 55.2 | 62.0 | 59.3 | 53.7 | 51.7 | 55.2 | 49.9 | 42.1 | 31.8 | 21.9 | 147.3 |
| 4000 | 37.3 | 43.5 | 48.8 | 50.0 | 55.7 | 52.5 | 49.9 | 47.2 | 46.8 | 40.0 | 31.7 | 18.6 | 3.6 | 147.6 |
| 5000 | 26.0 | 32.7 | 39.7 | 43.5 | 48.8 | 43.9 | 38.5 | 36.4 | 35.6 | 26.1 | 16.3 | 0.0 | | 148.7 |
| 6300 | 1.4 | 11.9 | 21.4 | 25.6 | 33.7 | 26.3 | 23.4 | 18.1 | 19.6 | 5.8 | | | | 147.2 |
| 8000 | | | | | | | | | | | | | | 146.3 |
| 10000 | | | | | | | | | | | | | | 148.8 |

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CASPL 72.2 73.2 75.2 75.2 82.9 77.3 77.2 78.4 80.7 80.9 77.2 70.1 73.0 160.8

PNL 77.8 80.2 82.6 83.3 87.7 85.8 84.0 84.6 85.8 84.3 79.0 71.7 73.8

PNLT 79.3 81.3 83.6 84.5 87.7 86.8 84.0 84.6 85.8 84.3 79.0 71.7 74.9

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 39.00

LOCATION C41 ANECH CH AERO. RDG. ADH111 PAMB 29.3300 RELHUM 54.60

MODEL TEST POINT 7506 ACOUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.96 M/SEC (387.0 FPS)

FREE-JET SPEED

07/19/79 18.682

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. E. 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FM0DL X76010
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 85.3 | 91.3 | 89.1 | 89.9 | 90.5 | 93.3 | 95.5 | 96.9 | 102.1 | 106.9 | 110.8 | 114.2 | 113.9 | 147.5 |
| 315 | 87.4 | 89.7 | 90.2 | 90.7 | 92.3 | 94.4 | 95.3 | 97.2 | 104.2 | 109.0 | 112.9 | 116.3 | 114.7 | 149.3 |
| 400 | 88.9 | 91.0 | 91.2 | 91.3 | 92.9 | 94.7 | 96.3 | 97.8 | 105.2 | 112.8 | 115.4 | 117.4 | 114.3 | 150.9 |
| 500 | 89.5 | 92.3 | 92.6 | 92.6 | 94.7 | 96.1 | 97.4 | 99.1 | 106.3 | 113.9 | 117.3 | 118.2 | 114.8 | 152.1 |
| 630 | 90.9 | 93.4 | 93.4 | 94.0 | 102.0 | 97.2 | 98.8 | 101.5 | 108.9 | 115.0 | 118.1 | 118.6 | 115.7 | 153.0 |
| 800 | 94.7 | 93.9 | 95.0 | 95.7 | 96.3 | 98.0 | 100.3 | 103.0 | 110.2 | 115.3 | 118.9 | 119.6 | 116.2 | 153.7 |
| 1000 | 98.3 | 99.1 | 99.8 | 98.1 | 98.2 | 99.8 | 100.9 | 103.1 | 111.6 | 115.4 | 118.5 | 119.2 | 116.1 | 153.7 |
| 1250 | 94.6 | 98.2 | 98.7 | 98.7 | 100.1 | 101.7 | 102.3 | 104.5 | 111.4 | 115.1 | 119.4 | 119.6 | 115.0 | 154.0 |
| 1600 | 97.5 | 96.9 | 97.4 | 97.9 | 99.0 | 101.1 | 102.7 | 105.6 | 112.5 | 115.2 | 119.2 | 118.1 | 113.6 | 153.6 |
| 2000 | 98.7 | 99.7 | 99.7 | 98.7 | 99.1 | 100.4 | 102.3 | 105.2 | 112.6 | 115.3 | 118.5 | 115.7 | 111.2 | 152.8 |
| 2500 | 98.1 | 98.9 | 98.9 | 99.4 | 99.5 | 101.1 | 103.5 | 106.1 | 112.0 | 115.8 | 117.4 | 114.6 | 109.6 | 152.3 |
| 3150 | 99.1 | 100.6 | 99.4 | 99.4 | 99.7 | 101.6 | 103.0 | 106.6 | 112.5 | 115.0 | 115.9 | 113.1 | 108.4 | 151.6 |
| 4000 | 97.6 | 99.2 | 99.4 | 98.9 | 99.7 | 101.1 | 102.7 | 106.2 | 111.3 | 114.6 | 114.2 | 111.9 | 106.6 | 150.7 |
| 5000 | 97.1 | 99.7 | 99.5 | 99.0 | 99.8 | 101.7 | 103.3 | 106.5 | 111.1 | 113.9 | 113.3 | 109.9 | 105.2 | 150.2 |
| 6300 | 94.8 | 98.7 | 99.5 | 99.7 | 100.2 | 102.1 | 103.3 | 105.7 | 110.4 | 112.6 | 111.6 | 108.4 | 104.6 | 149.4 |
| 8000 | 93.9 | 97.3 | 97.6 | 99.5 | 100.8 | 102.0 | 102.5 | 104.4 | 109.5 | 111.2 | 110.0 | 107.9 | 104.0 | 148.7 |
| 10000 | 92.0 | 96.6 | 97.3 | 98.4 | 100.5 | 102.4 | 102.0 | 104.3 | 107.7 | 109.6 | 108.6 | 106.9 | 102.3 | 148.1 |
| 12500 | 89.8 | 95.4 | 96.1 | 97.2 | 99.0 | 100.6 | 101.3 | 102.4 | 105.3 | 107.3 | 105.8 | 104.1 | 101.4 | 146.8 |
| 16000 | 87.8 | 94.0 | 95.6 | 96.7 | 98.9 | 100.1 | 99.1 | 101.2 | 103.6 | 105.5 | 103.4 | 102.3 | 98.7 | 146.6 |
| 20000 | 82.8 | 91.6 | 92.6 | 94.7 | 98.0 | 98.9 | 96.3 | 98.1 | 100.4 | 101.9 | 99.9 | 99.6 | 96.4 | 145.5 |
| 25000 | 81.8 | 87.4 | 89.9 | 91.3 | 95.6 | 96.0 | 94.3 | 93.6 | 97.9 | 97.2 | 96.0 | 95.6 | 94.4 | 144.6 |
| 31500 | 79.9 | 84.1 | 87.6 | 89.8 | 90.1 | 90.4 | 90.0 | 90.5 | 93.9 | 95.2 | 92.9 | 90.3 | 88.7 | 144.0 |
| 40000 | 75.6 | 79.1 | 82.3 | 84.6 | 88.8 | 89.1 | 85.1 | 85.4 | 88.6 | 90.7 | 88.2 | 85.4 | 84.6 | 143.9 |
| 50000 | 68.7 | 72.4 | 75.7 | 78.2 | 80.1 | 81.1 | 80.3 | 78.8 | 84.2 | 84.7 | 82.6 | 80.3 | 77.7 | 142.1 |
| 63000 | 63.4 | 66.7 | 69.4 | 71.5 | 72.4 | 73.1 | 74.6 | 72.4 | 80.3 | 78.9 | 76.5 | 75.1 | 72.4 | 141.6 |
| 80000 | 57.4 | 60.1 | 63.4 | 66.6 | 65.6 | 67.8 | 67.5 | 67.7 | 75.3 | 73.3 | 73.3 | 68.8 | 65.5 | 143.1 |
| CASPL | 108.0 | 110.1 | 110.3 | 110.5 | 112.0 | 113.3 | 114.3 | 116.8 | 122.8 | 126.3 | 128.8 | 128.6 | 125.2 | 164.5 |

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| TEST DATE | 02-20-78 | TAPE NO. | N294 | ALPHA | SB59 | TAMB | 27.86 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH080 | PAMB | 29.2980 | RELHUM | 25.00 |

| MODEL | TEST POINT | ACOUSTIC RANGE | 12.2 M (40.0 FT) ARC | 154.7 SQ CM (23.99 SQ IN) - MODEL | 0. | FREE-JET SPEED | M/SEC (0. FPS) |
|-------|------------|----------------|-----------------------|------------------------------------|----|----------------|-----------------|
| 7600 | 7601 | | | | | | |

673

07/19/79 18.682

674

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F. 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X76010

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

150

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

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MODEL/FLU1 SIZE SCALE FACTOR 110.3 110.5 112.0 113.3 114.3 116.8 122.8 126.3 128.8 128.6 125.2 164.5

INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES

FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB559 TAMB 27.86
LOCATION C41 ANECH CH AERO. RDG. ADH080 PAMB 29.2980 RELHUM 25.00

MODEL TEST POINT 7601 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

07/19/79 18.682

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X76011

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 67.1 | 70.7 | 72.0 | 72.8 | 74.8 | 76.8 | 78.3 | 79.3 | 86.0 | 92.5 | 93.6 | 93.4 | 86.9 | 168.5 |
| 63 | 67.7 | 72.0 | 73.6 | 74.1 | 76.6 | 78.1 | 79.4 | 80.6 | 87.1 | 93.6 | 95.5 | 94.2 | 87.5 | 169.7 |
| 80 | 69.0 | 73.1 | 74.2 | 75.4 | 78.9 | 79.2 | 80.7 | 82.9 | 89.7 | 94.7 | 96.3 | 94.5 | 88.2 | 170.6 |
| 100 | 72.7 | 73.6 | 75.7 | 77.2 | 78.2 | 79.9 | 82.2 | 84.4 | 90.9 | 94.9 | 97.0 | 95.4 | 88.6 | 171.4 |
| 125 | 76.2 | 78.6 | 80.5 | 79.5 | 80.0 | 81.7 | 82.7 | 84.5 | 92.2 | 94.9 | 96.5 | 94.9 | 88.2 | 171.3 |
| 160 | 72.4 | 77.6 | 79.2 | 80.0 | 81.7 | 83.5 | 84.0 | 85.7 | 91.9 | 94.4 | 97.2 | 95.0 | 86.7 | 171.6 |
| 200 | 75.0 | 76.0 | 77.7 | 79.0 | 80.5 | 82.7 | 84.2 | 86.7 | 92.8 | 94.4 | 96.7 | 93.2 | 84.9 | 171.3 |
| 250 | 75.9 | 78.6 | 79.8 | 79.6 | 80.4 | 81.9 | 83.6 | 86.1 | 92.7 | 94.2 | 95.7 | 90.4 | 81.9 | 170.5 |
| 315 | 74.8 | 77.4 | 78.7 | 80.0 | 80.5 | 82.3 | 84.5 | 86.7 | 91.8 | 94.3 | 94.2 | 88.7 | 79.4 | 170.0 |
| 400 | 75.3 | 78.8 | 78.8 | 79.7 | 80.5 | 82.5 | 83.7 | 86.9 | 92.0 | 93.2 | 92.2 | 86.6 | 77.2 | 169.3 |
| 500 | 73.4 | 76.9 | 78.5 | 78.9 | 80.2 | 81.7 | 83.2 | 86.1 | 90.4 | 92.3 | 90.0 | 84.7 | 74.5 | 168.4 |
| 630 | 72.4 | 77.1 | 78.3 | 78.7 | 80.0 | 82.0 | 83.5 | 86.2 | 89.9 | 91.3 | 88.6 | 82.1 | 72.0 | 167.9 |
| 800 | 68.6 | 75.7 | 77.9 | 79.1 | 80.2 | 82.2 | 83.2 | 85.1 | 88.8 | 89.5 | 86.4 | 78.9 | 70.3 | 167.1 |
| 1000 | 68.3 | 74.0 | 75.9 | 78.8 | 80.6 | 82.0 | 83.2 | 83.6 | 87.8 | 87.8 | 84.3 | 78.7 | 68.5 | 166.4 |
| 1250 | 65.9 | 72.9 | 75.3 | 77.5 | 80.2 | 82.3 | 81.7 | 83.4 | 85.7 | 86.0 | 82.4 | 76.9 | 65.4 | 165.7 |
| 1600 | 62.8 | 71.1 | 73.6 | 75.9 | 78.4 | 80.2 | 80.7 | 81.2 | 82.9 | 83.0 | 78.8 | 72.7 | 62.1 | 164.4 |
| 2000 | 59.8 | 69.2 | 72.8 | 75.2 | 78.1 | 79.6 | 78.3 | 79.7 | 80.8 | 80.7 | 75.5 | 69.2 | 56.4 | 164.2 |
| 2500 | 53.0 | 65.5 | 68.9 | 72.6 | 76.7 | 77.8 | 74.9 | 75.9 | 76.7 | 75.8 | 70.1 | 63.8 | 49.2 | 163.2 |
| 3150 | 48.7 | 58.9 | 64.3 | 67.5 | 72.9 | 73.6 | 71.6 | 69.8 | 72.3 | 68.7 | 62.9 | 54.7 | 38.8 | 162.3 |
| 4000 | 40.5 | 50.9 | 58.2 | 62.8 | 64.4 | 65.1 | 64.3 | 63.5 | 64.5 | 61.9 | 53.4 | 40.6 | 18.6 | 161.6 |
| 5000 | 26.5 | 38.3 | 46.7 | 52.1 | 58.1 | 58.9 | 54.4 | 52.9 | 53.0 | 49.9 | 39.1 | 21.9 | 161.6 | |
| 6300 | 1.8 | 17.4 | 28.0 | 35.0 | 39.3 | 41.1 | 39.5 | 35.6 | 36.5 | 29.6 | 15.8 | | 159.7 | |
| 8000 | | | | | | | | | | | | | 159.3 | |
| 10000 | | | | | | | | | | | | | 160.6 | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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OASPL 84.7 88.1 89.7 90.6 92.6 93.9 94.9 97.0 102.4 105.0 106.0 103.5 96.3 161.9
PNL 89.1 93.8 96.0 97.9 100.7 102.0 101.8 103.3 107.6 109.0 108.5 104.5 95.9
PWL 90.3 94.3 96.5 97.8 102.0 103.3 101.8 103.3 107.6 109.0 108.5 104.5 97.0

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAMB 27.88
LOCATION C41 ANECH CH AERO. RDG. ADH080 PAMB 29.2980 RELHUM 25.00

MODEL TEST POINT 7601 ACOUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. FREE-JET SPEED M/SEC (0. FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMCDL X76020
BACKGROUND FJB400-FMCDL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. FWL

FREQ

50

63

80

100

125

160

200

250 81.5 84.3 84.0 85.7 86.0 88.2 90.3 93.3 97.5 102.6 107.3 111.0 110.6 144.0
315 83.5 84.3 85.3 87.2 89.3 90.2 92.9 99.1 104.7 109.4 111.8 109.5 144.9
400 84.6 85.1 86.2 85.6 87.5 90.4 90.5 93.4 100.4 108.5 111.9 113.1 108.3 146.6
500 84.9 85.7 87.2 87.5 88.8 91.2 92.1 95.0 101.8 109.6 113.7 112.7 105.3 147.4
630 86.0 86.8 88.3 88.6 94.0 92.6 93.7 96.9 104.1 110.7 113.6 111.3 101.7 147.3
800 88.3 87.4 89.4 90.2 90.8 93.6 95.0 98.7 106.2 111.7 114.1 109.8 99.5 147.8
1000 89.4 88.2 91.0 91.0 92.1 95.2 96.6 100.0 107.6 112.3 113.0 106.9 97.3 147.5
1250 88.8 90.8 92.6 92.4 93.7 95.8 97.0 101.2 108.3 112.0 113.6 105.5 96.7 147.7
1600 91.1 89.7 91.5 92.3 93.9 97.0 98.4 102.8 109.4 112.1 113.3 105.0 96.5 148.0
2000 91.3 91.1 92.1 92.1 93.5 95.8 98.5 102.9 109.8 113.0 112.7 104.6 96.1 148.1
2500 93.3 93.1 94.1 93.8 94.4 96.8 99.2 103.3 110.0 112.9 112.6 105.6 97.1 148.3
3150 93.3 94.1 94.7 95.2 95.7 98.3 100.0 104.7 110.6 112.5 113.0 105.1 97.6 148.6
4000 94.5 93.5 95.1 95.0 95.4 95.4 99.9 104.3 110.7 112.2 111.6 104.5 96.7 148.2
5000 95.4 95.2 96.0 95.7 96.8 99.1 100.5 104.7 110.7 112.9 111.3 103.9 96.7 148.6
6300 94.2 95.3 97.1 97.3 97.3 100.2 100.6 104.1 110.3 111.5 109.8 102.6 96.5 147.9
8000 94.4 94.8 96.4 97.3 98.3 100.2 100.3 104.1 109.6 110.0 108.0 101.2 95.4 147.3
10000 93.8 95.0 95.9 96.7 98.3 101.0 100.9 104.2 108.3 109.9 107.0 101.2 94.6 147.4
12500 92.7 94.6 95.6 95.9 97.4 99.8 99.5 102.4 106.0 107.4 104.0 99.2 94.0 146.1
16000 92.2 94.3 96.1 97.2 98.3 99.6 98.3 101.4 104.1 106.2 102.0 97.9 92.4 146.3
20000 87.5 91.9 92.9 95.2 97.3 98.6 96.0 98.6 101.0 102.6 98.9 95.4 90.8 145.4
25000 86.5 88.0 90.5 91.3 95.4 96.8 94.1 93.8 99.0 98.1 94.9 91.8 89.4 144.8
31500 85.1 84.0 88.0 90.1 90.4 91.1 90.1 90.8 94.5 95.6 92.1 87.6 83.9 144.2
40000 79.4 80.0 82.9 84.6 88.1 89.6 85.4 85.9 89.2 89.7 87.1 81.9 79.5 143.7
50000 72.9 73.1 75.5 78.5 80.1 82.1 80.3 79.6 85.1 82.9 80.4 76.8 73.7 141.8
63000 67.1 66.8 69.2 71.6 71.7 73.8 74.9 73.0 80.6 76.2 73.8 70.8 67.3 141.0
80000 60.6 59.7 62.9 66.6 64.8 67.5 66.2 73.3 73.9 69.1 61.2 58.9 141.2

OASPL 104.7 105.4 106.7 107.2 108.5 110.7 111.2 114.9 120.9 123.8 124.4 120.9 115.9 160.8

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 28.78
LOCATION C41 ANECH CH AERO. RDG. ADH996 PAMB 29.5600 RELHUM 43.70

MODEL TEST POINT 7602 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.96 M/SEC (387.0 FPS)
FREE-JET SPEED

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07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X75020

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 88.7 | 90.2 | 88.6 | 88.7 | 87.5 | 86.2 | 86.5 | 89.8 | 95.8 | 100.5 | 104.6 | 107.5 | 106.9 | 141.0 |
| 315 | 88.7 | 90.2 | 88.6 | 88.7 | 88.9 | 89.5 | 88.9 | 90.2 | 98.4 | 105.8 | 108.9 | 110.9 | 108.5 | 144.4 |
| 400 | 90.7 | 90.3 | 90.0 | 88.6 | 89.2 | 90.6 | 89.7 | 91.7 | 99.9 | 107.3 | 111.6 | 112.0 | 108.1 | 146.0 |
| 500 | 91.6 | 91.0 | 90.8 | 88.8 | 90.7 | 91.5 | 91.2 | 93.1 | 102.2 | 108.4 | 111.5 | 111.3 | 106.3 | 145.9 |
| 630 | 92.3 | 91.9 | 92.0 | 90.8 | 95.9 | 93.0 | 92.8 | 94.8 | 104.5 | 109.7 | 112.5 | 110.9 | 106.7 | 146.8 |
| 800 | 93.4 | 93.0 | 93.2 | 92.0 | 92.7 | 94.1 | 94.1 | 96.5 | 106.3 | 110.6 | 111.8 | 109.0 | 106.7 | 146.7 |
| 1000 | 95.7 | 93.6 | 94.3 | 93.6 | 94.2 | 95.8 | 95.8 | 97.9 | 106.9 | 110.3 | 112.4 | 107.4 | 105.8 | 146.8 |
| 1250 | 96.8 | 94.5 | 95.9 | 94.5 | 95.9 | 96.8 | 96.3 | 99.1 | 108.3 | 110.6 | 112.3 | 107.1 | 105.7 | 147.1 |
| 1600 | 96.2 | 97.1 | 97.6 | 96.0 | 96.2 | 98.0 | 97.9 | 101.0 | 108.9 | 111.6 | 111.7 | 106.7 | 104.9 | 147.5 |
| 2000 | 98.5 | 96.0 | 96.6 | 96.0 | 96.0 | 97.0 | 98.2 | 101.3 | 109.5 | 112.1 | 112.3 | 108.4 | 107.1 | 148.1 |
| 2500 | 98.4 | 97.2 | 97.1 | 95.9 | 97.1 | 98.3 | 99.2 | 102.1 | 110.6 | 112.3 | 113.2 | 108.6 | 108.4 | 148.8 |
| 3150 | 99.5 | 96.7 | 98.8 | 97.5 | 98.8 | 100.2 | 100.5 | 103.9 | 111.3 | 112.3 | 112.3 | 108.2 | 107.4 | 149.0 |
| 4000 | 100.6 | 100.5 | 100.0 | 99.4 | 98.9 | 100.9 | 100.9 | 104.1 | 111.5 | 113.3 | 111.9 | 107.5 | 106.9 | 149.4 |
| 5000 | 101.7 | 100.0 | 100.6 | 99.5 | 100.8 | 102.1 | 102.0 | 104.8 | 111.2 | 112.0 | 110.6 | 106.3 | 107.1 | 149.0 |
| 6300 | 102.5 | 101.7 | 101.3 | 100.5 | 101.3 | 103.2 | 102.1 | 104.2 | 110.6 | 110.6 | 108.9 | 105.0 | 106.2 | 148.5 |
| 8000 | 101.2 | 101.7 | 102.6 | 101.9 | 102.3 | 103.2 | 101.8 | 104.2 | 109.5 | 110.6 | 108.1 | 105.3 | 105.6 | 148.6 |
| 10000 | 101.2 | 101.0 | 101.8 | 101.7 | 102.3 | 104.0 | 102.4 | 104.3 | 108.1 | 109.1 | 106.2 | 104.8 | 106.8 | 148.4 |
| 12500 | 100.4 | 100.9 | 101.0 | 100.9 | 101.4 | 102.8 | 101.4 | 102.9 | 106.8 | 108.5 | 104.9 | 104.2 | 106.0 | 148.3 |
| 16000 | 98.7 | 100.0 | 100.3 | 99.5 | 102.3 | 102.6 | 100.3 | 102.1 | 104.9 | 106.3 | 103.3 | 103.0 | 105.6 | 148.4 |
| 20000 | 97.9 | 99.3 | 100.3 | 100.4 | 101.8 | 101.6 | 98.3 | 99.9 | 104.3 | 103.1 | 100.0 | 99.6 | 103.7 | 148.7 |
| 25000 | 95.2 | 98.5 | 98.1 | 98.9 | 99.9 | 99.8 | 96.6 | 95.8 | 99.7 | 100.6 | 97.8 | 96.5 | 100.0 | 148.6 |
| 31500 | 93.5 | 93.7 | 94.9 | 94.2 | 94.3 | 94.1 | 92.4 | 92.1 | 96.2 | 96.5 | 94.4 | 92.1 | 96.5 | 147.5 |
| 40000 | 88.5 | 86.8 | 89.9 | 91.1 | 92.6 | 92.6 | 87.9 | 87.8 | 82.4 | 80.1 | 88.1 | 87.6 | 91.3 | 147.5 |
| 50000 | 85.1 | 84.5 | 86.1 | 86.3 | 84.7 | 85.1 | 82.8 | 81.4 | 88.6 | 84.0 | 82.3 | 82.5 | 86.1 | 146.5 |
| 63000 | 77.7 | 76.7 | 77.8 | 79.2 | 75.6 | 76.8 | 77.3 | 74.6 | 81.8 | 79.0 | 77.7 | 73.3 | 78.5 | 144.7 |
| 80000 | 67.7 | 66.8 | 68.3 | 69.7 | 69.3 | 70.5 | 68.5 | 67.2 | 72.0 | 69.2 | 67.9 | 63.5 | 68.7 | 142.6 |
| QASPL | 111.6 | 111.4 | 111.8 | 111.2 | 112.2 | 113.2 | 112.1 | 114.5 | 121.1 | 123.2 | 123.6 | 121.1 | 119.7 | 161.6 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | REFRACTION CORRECTION - YES |
|------------------------------|------------------------------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) 40.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | 5859 | TAMB | 28.78 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH996 | PAMB | 29.5600 | RELHUM | 43.70 |

| MODEL | TEST POINT | ACUSTIC RANGE | ARC | 154.7 SQ CM (| 23.99 SQ IN) | MODEL | 117.96 M/SEC (| 387.0 FPS) |
|-------|------------|---------------|----------|---------------|--------------|-------|----------------|------------|
| 7600 | 7602 | 12.2 M (| 40.0 FT) | | | | | |

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X76021

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 68.9 | 70.1 | 70.8 | 70.1 | 71.2 | 72.7 | 71.7 | 73.2 | 80.7 | 87.1 | 89.8 | 88.0 | 80.8 | 183.6 |
| 63 | 69.8 | 70.7 | 71.6 | 70.4 | 72.6 | 73.6 | 73.2 | 74.6 | 83.0 | 88.1 | 89.7 | 87.2 | 79.0 | 163.6 |
| 80 | 70.5 | 71.6 | 72.7 | 72.3 | 77.8 | 75.0 | 74.7 | 76.3 | 85.2 | 89.4 | 90.6 | 86.8 | 79.2 | 164.4 |
| 100 | 71.5 | 72.6 | 73.9 | 73.5 | 74.6 | 76.1 | 76.0 | 78.0 | 87.1 | 90.2 | 89.9 | 84.8 | 79.1 | 164.4 |
| 125 | 73.7 | 73.1 | 74.9 | 75.0 | 76.0 | 77.8 | 77.6 | 79.3 | 87.6 | 89.8 | 90.3 | 83.1 | 78.0 | 164.4 |
| 160 | 74.6 | 73.8 | 76.4 | 75.8 | 77.6 | 78.4 | 77.9 | 80.4 | 88.8 | 90.0 | 90.0 | 82.5 | 77.5 | 164.8 |
| 200 | 73.7 | 76.3 | 77.9 | 77.1 | 77.7 | 79.6 | 79.4 | 82.1 | 89.2 | 90.8 | 89.2 | 81.7 | 76.2 | 165.1 |
| 250 | 75.7 | 74.9 | 76.7 | 76.9 | 77.3 | 78.5 | 79.5 | 82.2 | 89.6 | 91.0 | 89.5 | 83.1 | 77.7 | 165.8 |
| 315 | 75.1 | 75.8 | 76.9 | 76.5 | 78.1 | 79.5 | 80.3 | 82.7 | 90.4 | 90.8 | 90.0 | 82.7 | 78.2 | 166.5 |
| 400 | 75.8 | 76.8 | 78.2 | 77.8 | 79.6 | 81.1 | 81.2 | 84.2 | 90.7 | 90.6 | 88.5 | 81.6 | 76.2 | 166.7 |
| 500 | 76.4 | 78.3 | 79.1 | 79.3 | 79.3 | 81.5 | 81.3 | 84.0 | 90.5 | 91.0 | 87.7 | 80.3 | 74.8 | 167.0 |
| 630 | 77.0 | 77.4 | 79.3 | 79.2 | 81.0 | 82.5 | 82.2 | 84.5 | 89.9 | 89.3 | 85.9 | 78.4 | 73.9 | 166.6 |
| 800 | 77.3 | 78.7 | 80.1 | 79.9 | 81.3 | 83.3 | 82.0 | 83.6 | 89.1 | 87.6 | 83.7 | 76.5 | 71.8 | 166.2 |
| 1000 | 75.6 | 78.4 | 80.9 | 81.1 | 82.1 | 83.2 | 81.6 | 83.5 | 87.8 | 87.3 | 82.4 | 76.1 | 70.1 | 166.3 |
| 1250 | 75.1 | 77.3 | 79.8 | 80.8 | 82.0 | 83.8 | 82.0 | 83.3 | 86.1 | 85.4 | 80.1 | 74.7 | 69.9 | 166.1 |
| 1600 | 73.4 | 76.6 | 79.6 | 79.6 | 80.7 | 82.4 | 80.8 | 81.7 | 84.4 | 84.3 | 77.9 | 72.8 | 66.7 | 166.0 |
| 2000 | 70.7 | 75.1 | 77.5 | 78.0 | 81.5 | 82.0 | 79.6 | 80.6 | 82.1 | 81.4 | 75.3 | 70.0 | 63.3 | 166.1 |
| 2500 | 68.1 | 73.2 | 76.6 | 78.2 | 80.4 | 80.5 | 77.0 | 77.8 | 80.6 | 77.0 | 70.2 | 63.8 | 56.5 | 166.4 |
| 3150 | 62.1 | 69.9 | 72.5 | 75.2 | 77.2 | 77.4 | 73.8 | 72.0 | 74.2 | 72.1 | 64.7 | 55.7 | 44.4 | 166.2 |
| 4000 | 54.1 | 60.5 | 65.5 | 67.2 | 68.6 | 68.8 | 66.7 | 65.1 | 66.8 | 63.3 | 56.0 | 42.4 | 26.4 | 165.2 |
| 5000 | 39.4 | 46.0 | 54.3 | 58.6 | 61.9 | 62.4 | 57.2 | 55.4 | 56.8 | 49.3 | 39.0 | 24.1 | | 165.1 |
| 6300 | 18.1 | 29.5 | 38.4 | 43.1 | 43.9 | 45.1 | 42.0 | 38.2 | 40.9 | 29.0 | 15.4 | | | 164.2 |
| 8000 | | | 8.7 | 16.7 | 16.7 | 19.0 | 18.4 | 12.2 | 12.7 | | | | | 162.4 |
| 10000 | | | | | | | | | | | | | | 160.3 |

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0ASFL 86.9 88.4 90.2 90.4 92.0 93.2 92.3 94.3 100.4 101.4 100.5 95.2 89.0 179.2
 PNL 93.8 96.8 99.4 100.4 102.3 103.1 101.1 102.4 106.7 106.9 104.3 97.7 91.8
 PNL 93.8 96.8 100.2 101.0 103.6 104.3 101.1 102.4 107.4 106.9 104.3 97.7 91.8

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 28.78
 LOCATION C41 ANECH CH AERO. RDG. ADH996 PAMB 29.5600 RELHUM 43.70

MODEL TEST POINT 7602 ACCUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.96 M/SEC (987.0 FPS) SIZE FREE-JET SPEED

07/19/79 18.682

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X76030
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 85.8 | 91.6 | 89.3 | 90.4 | 90.7 | 93.3 | 98.0 | 97.1 | 101.6 | 106.4 | 111.3 | 115.0 | 113.9 | 147.8 |
| 315 | 87.1 | 89.7 | 90.7 | 93.1 | 94.7 | 95.6 | 97.2 | 103.7 | 109.0 | 112.6 | 116.3 | 114.2 | 149.1 | |
| 400 | 88.2 | 91.0 | 91.2 | 91.0 | 92.9 | 95.0 | 96.4 | 97.8 | 105.0 | 112.5 | 115.7 | 117.4 | 114.5 | 150.9 |
| 500 | 89.6 | 92.0 | 92.8 | 93.1 | 94.2 | 96.3 | 97.4 | 99.1 | 106.3 | 114.1 | 117.0 | 119.2 | 115.1 | 152.4 |
| 630 | 91.1 | 93.7 | 93.9 | 93.7 | 94.1 | 97.4 | 99.1 | 101.0 | 108.4 | 114.0 | 117.9 | 119.3 | 116.0 | 152.9 |
| 800 | 95.2 | 94.5 | 95.2 | 96.0 | 96.8 | 98.2 | 100.1 | 102.5 | 109.7 | 114.6 | 118.7 | 119.6 | 116.5 | 153.5 |
| 1000 | 98.8 | 99.8 | 100.1 | 98.6 | 98.0 | 99.6 | 101.2 | 103.4 | 111.1 | 114.2 | 118.5 | 119.7 | 116.4 | 153.6 |
| 1250 | 95.6 | 99.7 | 99.5 | 100.0 | 101.6 | 102.2 | 103.1 | 105.0 | 111.4 | 113.8 | 119.4 | 120.1 | 115.2 | 154.0 |
| 1600 | 98.5 | 97.6 | 97.4 | 97.8 | 99.7 | 101.1 | 103.2 | 105.4 | 112.3 | 114.5 | 119.9 | 118.6 | 113.9 | 153.9 |
| 2000 | 99.2 | 100.7 | 99.7 | 98.7 | 98.8 | 100.4 | 102.3 | 105.2 | 112.1 | 114.8 | 118.5 | 116.0 | 111.5 | 152.7 |
| 2500 | 99.0 | 99.3 | 99.1 | 99.6 | 100.2 | 101.1 | 103.7 | 106.1 | 111.8 | 115.2 | 118.1 | 114.3 | 109.6 | 152.4 |
| 3150 | 98.8 | 100.6 | 99.8 | 100.1 | 99.9 | 101.5 | 103.4 | 106.1 | 112.2 | 114.0 | 116.6 | 113.3 | 108.8 | 151.6 |
| 4000 | 97.0 | 98.6 | 98.4 | 98.9 | 100.2 | 100.8 | 102.7 | 105.9 | 111.3 | 114.0 | 114.6 | 110.8 | 106.6 | 150.5 |
| 5000 | 96.1 | 97.9 | 98.2 | 98.7 | 99.5 | 101.6 | 103.5 | 106.2 | 110.6 | 113.5 | 113.4 | 110.4 | 104.9 | 150.0 |
| 6300 | 94.3 | 97.1 | 98.4 | 98.9 | 99.6 | 102.5 | 103.4 | 105.1 | 110.0 | 112.2 | 112.0 | 109.1 | 104.8 | 149.3 |
| 8000 | 93.3 | 96.7 | 96.8 | 97.9 | 99.8 | 101.2 | 102.7 | 104.8 | 108.7 | 110.5 | 110.4 | 107.8 | 103.6 | 148.4 |
| 10000 | 91.9 | 95.5 | 96.9 | 97.3 | 99.7 | 101.6 | 101.7 | 104.5 | 107.5 | 109.5 | 108.5 | 107.1 | 102.2 | 147.9 |
| 12500 | 89.2 | 94.3 | 95.4 | 96.8 | 98.4 | 100.0 | 100.5 | 102.6 | 105.2 | 106.9 | 106.7 | 104.5 | 101.0 | 146.7 |
| 16000 | 87.2 | 93.4 | 95.2 | 96.3 | 98.5 | 99.5 | 99.0 | 101.1 | 103.2 | 105.1 | 104.3 | 102.4 | 99.4 | 146.4 |
| 20000 | 82.4 | 90.9 | 92.2 | 94.1 | 97.7 | 98.0 | 96.9 | 97.7 | 99.8 | 101.7 | 101.0 | 98.8 | 96.8 | 145.2 |
| 25000 | 81.2 | 87.2 | 89.5 | 90.9 | 95.3 | 95.7 | 93.0 | 92.2 | 97.8 | 97.5 | 97.4 | 95.4 | 94.8 | 144.5 |
| 31500 | 79.5 | 83.8 | 87.0 | 89.7 | 90.2 | 90.0 | 89.4 | 90.2 | 93.3 | 95.5 | 93.7 | 90.0 | 88.8 | 143.9 |
| 40000 | 75.0 | 79.2 | 81.9 | 84.2 | 88.2 | 88.2 | 84.3 | 84.5 | 88.4 | 90.0 | 89.4 | 85.3 | 84.2 | 143.5 |
| 50000 | 68.1 | 72.1 | 74.8 | 77.3 | 80.0 | 81.0 | 79.7 | 78.4 | 84.4 | 84.5 | 83.7 | 80.0 | 78.6 | 142.0 |
| 63000 | 62.8 | 66.4 | 68.8 | 71.7 | 72.3 | 72.2 | 74.3 | 72.1 | 80.2 | 78.1 | 77.4 | 75.0 | 72.8 | 141.4 |
| 80000 | 57.3 | 59.5 | 63.0 | 66.3 | 66.0 | 67.2 | 67.2 | 67.1 | 74.2 | 72.6 | 73.7 | 67.9 | 65.9 | 142.6 |
| GASPL | 108.2 | 110.0 | 110.1 | 110.4 | 111.8 | 113.1 | 114.4 | 116.7 | 122.4 | 125.7 | 129.0 | 129.0 | 125.4 | 164.4 |

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TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAMB 29.12
LOCATION C41 ANECH CH AERO. RDG. ADH076 PAMB 29.2960 RELHUM 20.20

MODEL TEST POINT 7603 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

07/19/79 18.662

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT., SL

IDENTIFICATION - FJ-ZER-FMODL X76031

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 66.4 | 70.7 | 72.1 | 72.6 | 74.8 | 77.1 | 78.3 | 79.3 | 85.8 | 92.3 | 93.9 | 93.4 | 87.2 | 168.6 |
| 63 | 67.9 | 71.8 | 73.6 | 74.6 | 76.1 | 78.4 | 79.4 | 80.6 | 87.1 | 93.9 | 95.2 | 95.2 | 87.7 | 170.1 |
| 80 | 69.3 | 73.4 | 74.7 | 75.2 | 81.0 | 79.5 | 81.0 | 82.5 | 89.2 | 93.7 | 96.0 | 95.2 | 88.5 | 170.6 |
| 100 | 73.2 | 74.1 | 75.9 | 77.5 | 78.5 | 80.2 | 82.0 | 84.0 | 90.4 | 94.2 | 96.7 | 95.4 | 88.9 | 171.2 |
| 125 | 76.7 | 79.4 | 80.7 | 80.0 | 79.7 | 81.5 | 83.0 | 84.7 | 91.7 | 93.7 | 96.5 | 95.4 | 88.5 | 171.3 |
| 160 | 73.4 | 79.1 | 80.0 | 81.2 | 83.2 | 84.0 | 84.7 | 85.2 | 91.9 | 93.2 | 97.2 | 95.5 | 87.0 | 171.7 |
| 200 | 76.0 | 76.8 | 77.7 | 79.0 | 81.2 | 82.7 | 84.7 | 86.5 | 92.6 | 93.7 | 97.4 | 93.7 | 85.2 | 171.5 |
| 250 | 76.3 | 79.6 | 79.8 | 79.6 | 80.1 | 81.9 | 83.6 | 86.1 | 92.2 | 93.7 | 95.7 | 90.6 | 82.1 | 170.4 |
| 315 | 75.8 | 77.9 | 78.9 | 80.2 | 81.2 | 82.2 | 84.7 | 86.7 | 91.5 | 93.8 | 94.9 | 88.4 | 79.4 | 170.1 |
| 400 | 75.0 | 78.7 | 79.3 | 80.4 | 80.7 | 82.4 | 84.2 | 86.4 | 91.7 | 92.1 | 92.9 | 86.8 | 77.7 | 169.3 |
| 500 | 72.8 | 76.3 | 77.4 | 78.8 | 80.6 | 81.4 | 83.1 | 85.8 | 90.3 | 91.7 | 90.4 | 83.6 | 74.4 | 168.2 |
| 630 | 71.4 | 75.2 | 76.9 | 78.3 | 79.7 | 81.9 | 83.7 | 85.8 | 89.3 | 90.9 | 88.7 | 82.5 | 71.7 | 167.7 |
| 800 | 69.1 | 74.1 | 76.8 | 78.3 | 79.6 | 82.6 | 83.4 | 84.5 | 88.5 | 89.2 | 86.8 | 80.5 | 70.5 | 167.0 |
| 1000 | 67.7 | 73.4 | 75.0 | 77.2 | 79.5 | 81.1 | 82.5 | 84.0 | 86.9 | 87.2 | 84.7 | 78.6 | 68.1 | 166.0 |
| 1250 | 65.8 | 71.8 | 74.9 | 76.3 | 79.3 | 81.4 | 81.4 | 83.5 | 85.5 | 85.8 | 82.3 | 77.0 | 65.3 | 165.6 |
| 1600 | 62.2 | 70.0 | 73.0 | 75.5 | 77.8 | 79.6 | 79.9 | 81.3 | 82.8 | 82.7 | 79.7 | 73.1 | 61.7 | 164.3 |
| 2000 | 59.2 | 68.5 | 72.4 | 74.8 | 77.7 | 79.0 | 78.2 | 79.6 | 80.4 | 80.3 | 76.3 | 69.4 | 57.1 | 164.1 |
| 2500 | 52.7 | 64.9 | 68.5 | 71.9 | 76.3 | 76.9 | 74.6 | 75.5 | 76.1 | 75.7 | 71.2 | 62.9 | 49.6 | 162.9 |
| 3150 | 48.1 | 58.7 | 64.0 | 67.2 | 72.6 | 73.3 | 70.3 | 68.5 | 72.2 | 69.0 | 64.3 | 54.6 | 39.2 | 162.1 |
| 4000 | 40.1 | 50.5 | 57.6 | 62.7 | 64.5 | 64.7 | 63.7 | 63.2 | 63.9 | 62.3 | 54.3 | 40.2 | 18.7 | 161.6 |
| 5000 | 25.9 | 38.4 | 46.3 | 51.8 | 57.5 | 58.1 | 53.6 | 52.1 | 52.8 | 49.3 | 40.2 | 21.8 | 161.2 | |
| 6300 | 1.2 | 17.1 | 27.1 | 34.1 | 39.2 | 41.0 | 38.9 | 35.2 | 36.7 | 29.5 | 16.7 | | 159.7 | |
| 8000 | | | | 9.2 | 13.4 | 14.5 | 15.3 | 9.6 | 11.1 | | | | 159.1 | |
| 10000 | | | | | | | | | | | | | 160.3 | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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| | | | | | | | | | | | | | | |
|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| GASPL | 85.0 | 88.3 | 89.6 | 90.6 | 92.3 | 93.8 | 95.0 | 96.9 | 102.1 | 104.3 | 106.2 | 103.9 | 96.5 | 181.9 |
| PWL | 89.0 | 93.7 | 95.7 | 97.7 | 100.4 | 101.5 | 101.6 | 103.1 | 107.3 | 108.5 | 108.9 | 104.8 | 96.1 | |
| PWL | 90.2 | 94.7 | 95.7 | 97.7 | 101.6 | 102.7 | 101.6 | 103.1 | 107.8 | 108.5 | 110.0 | 104.8 | 97.2 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAMB 29.12
LOCATION C41 ANECH CH AERO. RDG. ADH076 PAMB 29.2960 RELHUM 20.20

MODEL TEST POINT 7603 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X76040
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

| | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 81.0 | 83.7 | 83.8 | 85.1 | 86.0 | 88.4 | 90.1 | 92.8 | 97.5 | 102.6 | 107.3 | 111.0 | 110.1 | 143.9 |
| 315 | 83.0 | 84.3 | 85.0 | 85.6 | 86.9 | 89.3 | 89.7 | 92.4 | 99.1 | 105.0 | 109.1 | 112.3 | 110.2 | 145.2 |
| 400 | 84.6 | 84.8 | 86.4 | 86.1 | 87.2 | 89.9 | 90.5 | 93.2 | 100.2 | 106.0 | 111.9 | 113.1 | 108.0 | 146.5 |
| 500 | 84.9 | 85.4 | 87.5 | 87.2 | 89.6 | 90.7 | 92.4 | 94.5 | 101.6 | 109.4 | 113.5 | 112.4 | 104.8 | 147.1 |
| 630 | 86.0 | 86.3 | 88.3 | 88.4 | 89.7 | 92.8 | 93.6 | 96.9 | 104.1 | 110.2 | 113.6 | 112.0 | 101.7 | 147.4 |
| 800 | 88.1 | 87.1 | 89.4 | 89.9 | 90.5 | 93.9 | 94.8 | 98.4 | 105.7 | 111.0 | 113.9 | 109.5 | 99.0 | 147.4 |
| 1000 | 89.2 | 88.2 | 90.5 | 90.3 | 91.9 | 94.7 | 95.9 | 99.5 | 107.3 | 110.6 | 112.2 | 106.6 | 97.3 | 146.5 |
| 1250 | 89.5 | 90.6 | 92.1 | 91.9 | 93.2 | 95.6 | 97.2 | 100.4 | 107.5 | 110.5 | 112.8 | 105.2 | 95.9 | 146.8 |
| 1600 | 91.1 | 89.5 | 91.0 | 91.5 | 93.6 | 96.5 | 98.1 | 101.8 | 108.7 | 110.6 | 112.3 | 103.3 | 95.8 | 146.9 |
| 2000 | 92.3 | 91.9 | 92.4 | 91.9 | 93.0 | 96.1 | 98.0 | 102.4 | 108.5 | 111.2 | 111.9 | 103.1 | 95.9 | 146.9 |
| 2500 | 93.5 | 94.0 | 94.8 | 94.1 | 94.6 | 96.8 | 99.4 | 102.6 | 109.0 | 111.9 | 111.9 | 104.1 | 96.6 | 147.4 |
| 3150 | 93.3 | 93.9 | 95.2 | 95.6 | 95.5 | 98.1 | 99.5 | 103.7 | 109.6 | 111.5 | 111.7 | 105.1 | 96.9 | 147.6 |
| 4000 | 93.2 | 93.0 | 94.6 | 94.8 | 95.9 | 98.0 | 99.4 | 103.8 | 108.7 | 111.0 | 111.1 | 104.0 | 96.5 | 147.1 |
| 5000 | 93.9 | 93.8 | 94.8 | 95.0 | 96.1 | 98.4 | 99.8 | 103.7 | 108.9 | 111.5 | 110.3 | 103.7 | 96.2 | 147.3 |
| 6300 | 93.2 | 93.6 | 95.7 | 95.4 | 95.9 | 99.7 | 100.4 | 103.6 | 109.1 | 110.3 | 108.8 | 102.1 | 95.5 | 146.9 |
| 8000 | 92.9 | 94.1 | 94.3 | 95.8 | 96.9 | 99.8 | 100.3 | 103.7 | 108.7 | 109.4 | 106.8 | 100.2 | 94.5 | 146.5 |
| 10000 | 93.2 | 93.8 | 95.0 | 95.3 | 96.9 | 99.8 | 99.5 | 103.0 | 106.9 | 108.2 | 105.8 | 100.3 | 93.9 | 146.0 |
| 12500 | 92.0 | 93.0 | 93.9 | 95.0 | 96.0 | 98.1 | 98.3 | 101.5 | 104.9 | 106.0 | 103.4 | 98.8 | 92.5 | 144.9 |
| 16000 | 92.1 | 93.7 | 94.5 | 94.5 | 96.2 | 97.7 | 97.4 | 100.3 | 102.8 | 104.6 | 101.3 | 96.8 | 92.3 | 145.0 |
| 20000 | 87.4 | 91.3 | 92.6 | 93.9 | 96.1 | 97.2 | 94.9 | 97.7 | 99.6 | 101.2 | 97.8 | 94.2 | 90.2 | 144.2 |
| 25000 | 86.2 | 87.4 | 89.9 | 90.2 | 94.5 | 95.7 | 92.5 | 92.7 | 97.9 | 96.6 | 93.5 | 90.7 | 89.0 | 143.6 |
| 31500 | 84.5 | 84.2 | 87.9 | 89.0 | 89.2 | 90.3 | 89.2 | 90.0 | 93.2 | 94.3 | 92.0 | 86.5 | 83.3 | 143.2 |
| 40000 | 80.0 | 79.4 | 82.6 | 83.8 | 87.5 | 88.2 | 84.0 | 85.1 | 88.6 | 88.4 | 86.2 | 80.8 | 78.7 | 142.8 |
| 50000 | 72.6 | 72.5 | 75.0 | 77.4 | 79.5 | 80.5 | 79.2 | 78.0 | 83.8 | 81.1 | 79.5 | 75.7 | 72.6 | 140.6 |
| 63000 | 67.0 | 66.3 | 68.9 | 71.2 | 71.6 | 72.7 | 73.5 | 71.1 | 78.8 | 73.9 | 73.7 | 68.7 | 66.2 | 139.7 |
| 80000 | 60.7 | 59.4 | 62.6 | 65.8 | 64.7 | 67.1 | 66.2 | 65.4 | 71.5 | 67.9 | 67.6 | 60.4 | 58.3 | 139.9 |

GASPL 104.2 104.7 106.0 106.3 107.3 109.9 110.7 114.2 119.8 122.6 123.8 120.8 115.7 159.9

TEST DATE 02-27-79

LOCATION C41 ANECH

TAPE NO. N299

AERO. RDG. ADH995

ALPHA SB59

PAMB 29.5600

TAMB 30.20

RELHUM 43.80

MODEL TEST POINT

7604

ACQUSTIC RANGE

12.2 M (40.0 FT)

ARC

154.7 SQ CM (23.99 SQ IN)

SIZE

MODEL

117.96 M/SEC (387.0 FPS)

FREE-JET SPEED

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07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X76040

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 88.6 | 89.9 | 88.5 | 88.3 | 87.5 | 88.4 | 88.2 | 89.3 | 95.8 | 100.7 | 104.4 | 108.0 | 107.7 | 141.3 |
| 315 | 88.6 | 89.9 | 88.5 | 88.3 | 86.7 | 89.5 | 88.4 | 89.7 | 98.2 | 105.4 | 108.9 | 110.9 | 108.3 | 144.3 |
| 400 | 90.4 | 90.4 | 88.8 | 88.9 | 88.9 | 90.1 | 89.7 | 91.4 | 99.9 | 107.0 | 111.3 | 111.7 | 107.6 | 145.7 |
| 500 | 91.3 | 90.5 | 90.9 | 89.3 | 91.4 | 91.0 | 91.5 | 92.6 | 102.3 | 108.0 | 111.6 | 112.1 | 106.4 | 146.2 |
| 630 | 92.3 | 91.6 | 92.3 | 90.6 | 99.2 | 93.2 | 92.6 | 94.8 | 104.0 | 109.0 | 112.3 | 110.7 | 106.2 | 146.5 |
| 800 | 96.1 | 94.7 | 94.8 | 92.9 | 92.5 | 94.4 | 93.9 | 96.3 | 106.0 | 109.1 | 111.3 | 109.1 | 107.0 | 146.2 |
| 1000 | 95.5 | 93.3 | 94.3 | 93.4 | 93.9 | 95.3 | 95.1 | 97.5 | 106.2 | 108.6 | 111.7 | 107.4 | 105.3 | 146.0 |
| 1250 | 96.6 | 94.5 | 95.4 | 93.8 | 95.4 | 96.3 | 96.5 | 98.4 | 107.5 | 109.1 | 111.3 | 105.4 | 105.0 | 146.1 |
| 1600 | 95.9 | 96.8 | 97.1 | 95.5 | 96.0 | 97.5 | 97.6 | 100.0 | 107.7 | 110.0 | 111.1 | 105.5 | 105.3 | 146.5 |
| 2000 | 98.5 | 95.8 | 96.1 | 95.3 | 95.3 | 97.3 | 97.7 | 100.9 | 108.5 | 111.1 | 111.6 | 106.9 | 106.7 | 147.3 |
| 2500 | 98.4 | 97.3 | 96.9 | 95.4 | 97.2 | 98.3 | 99.6 | 101.4 | 109.6 | 111.4 | 112.1 | 108.8 | 107.9 | 148.1 |
| 3150 | 99.3 | 99.3 | 97.6 | 98.6 | 100.0 | 100.0 | 102.9 | 109.4 | 111.4 | 112.1 | 108.1 | 107.8 | 107.8 | 148.3 |
| 4000 | 100.6 | 100.3 | 100.5 | 99.9 | 99.4 | 100.4 | 103.6 | 109.8 | 111.9 | 111.1 | 107.6 | 107.2 | 148.5 | |
| 5000 | 100.5 | 99.5 | 100.1 | 99.3 | 100.0 | 101.4 | 103.3 | 103.9 | 110.0 | 110.6 | 109.7 | 106.0 | 106.4 | 148.0 |
| 6300 | 101.1 | 100.2 | 100.4 | 99.7 | 99.8 | 102.7 | 101.9 | 103.7 | 109.7 | 109.9 | 107.7 | 104.0 | 105.0 | 147.6 |
| 8000 | 100.3 | 100.0 | 101.2 | 99.9 | 100.9 | 101.8 | 103.6 | 108.3 | 109.2 | 107.2 | 104.9 | 105.7 | 147.5 | |
| 10000 | 99.8 | 100.3 | 99.6 | 100.3 | 100.9 | 102.8 | 101.1 | 103.2 | 106.8 | 107.5 | 105.5 | 104.3 | 105.3 | 147.2 |
| 12500 | 99.7 | 99.7 | 100.1 | 99.5 | 100.0 | 101.1 | 100.2 | 101.9 | 105.7 | 107.3 | 104.7 | 103.5 | 106.1 | 147.3 |
| 16000 | 98.1 | 98.4 | 98.4 | 98.6 | 100.2 | 100.7 | 99.5 | 101.2 | 103.8 | 105.2 | 102.4 | 102.1 | 105.0 | 147.3 |
| 20000 | 97.7 | 98.7 | 98.6 | 97.8 | 100.7 | 100.2 | 97.3 | 99.2 | 101.5 | 99.7 | 96.8 | 96.8 | 101.8 | 146.9 |
| 25000 | 95.1 | 97.8 | 97.8 | 97.6 | 99.1 | 98.7 | 94.1 | 93.2 | 98.5 | 99.5 | 97.8 | 95.5 | 99.4 | 147.6 |
| 31500 | 93.1 | 93.2 | 94.3 | 93.1 | 93.2 | 93.3 | 91.6 | 91.4 | 95.6 | 95.2 | 93.5 | 91.0 | 95.6 | 146.6 |
| 40000 | 87.9 | 86.9 | 89.8 | 90.0 | 92.0 | 91.2 | 86.5 | 87.0 | 91.1 | 88.2 | 87.1 | 86.2 | 89.8 | 146.5 |
| 50000 | 85.7 | 83.9 | 85.8 | 85.5 | 84.1 | 83.5 | 81.7 | 79.8 | 87.0 | 81.9 | 82.4 | 80.5 | 85.0 | 145.6 |
| 63000 | 77.3 | 76.1 | 77.2 | 78.1 | 75.6 | 75.7 | 76.0 | 72.9 | 80.7 | 76.9 | 77.4 | 73.4 | 78.5 | 143.8 |
| 80000 | 67.6 | 66.2 | 68.0 | 69.4 | 68.7 | 70.1 | 68.5 | 66.9 | 70.9 | 67.1 | 67.6 | 63.6 | 68.7 | 142.1 |
| GASPL | 111.1 | 110.8 | 111.0 | 110.2 | 111.3 | 112.2 | 111.6 | 113.8 | 120.0 | 122.1 | 123.0 | 120.9 | 119.5 | 160.8 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | FREE JET DIAMETER (IN) | REFRACTION CORRECTION - YES | TURBULANCE CORRECTION - YES |
|------------------------------|----------------------------|------------------------|-----------------------------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | 387.00 | 48.00 | | |

| TEST DATE | 02-27-78 | TAFE NO. | N299 | ALPHA | SB59 | TANB | 30.20 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH995 | PAMB | 29.5600 | RELHUM | 43.80 |

| MODEL | TEST POINT | ACOUSTIC RANGE | 12.2 M (40.0 FT) ARC | 154.7 SQ CM (23.99 SQ IN) - MODEL | 117.96 M/SEC (387.0 FPS) | FREE-JET SPEED |
|-------|------------|----------------|-----------------------|------------------------------------|---------------------------|----------------|
| 7600 | 7604 | | | | | |

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X76041

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 68.6 | 70.2 | 70.6 | 70.4 | 70.9 | 72.2 | 71.7 | 72.9 | 80.7 | 86.8 | 89.5 | 87.7 | 80.3 | 163.3 |
| 63 | 69.4 | 70.3 | 71.7 | 70.8 | 73.4 | 73.1 | 73.4 | 74.1 | 83.1 | 87.7 | 89.8 | 88.1 | 79.1 | 163.8 |
| 80 | 70.5 | 71.3 | 73.0 | 72.1 | 75.3 | 74.5 | 76.3 | 84.7 | 88.7 | 90.4 | 86.6 | 86.6 | 78.7 | 164.2 |
| 100 | 74.2 | 74.3 | 75.5 | 74.3 | 74.3 | 76.3 | 75.7 | 77.7 | 86.7 | 88.7 | 89.4 | 84.9 | 79.4 | 163.8 |
| 125 | 73.4 | 72.9 | 74.9 | 74.7 | 75.7 | 77.2 | 76.9 | 78.9 | 86.9 | 88.4 | 89.7 | 83.0 | 77.5 | 163.7 |
| 160 | 74.3 | 73.8 | 75.9 | 75.0 | 77.1 | 78.1 | 78.2 | 79.7 | 88.0 | 88.5 | 89.0 | 80.8 | 76.8 | 163.7 |
| 200 | 73.4 | 76.0 | 77.4 | 76.6 | 77.5 | 79.1 | 79.1 | 81.1 | 88.0 | 89.2 | 88.7 | 80.6 | 76.6 | 164.1 |
| 250 | 75.7 | 74.7 | 76.1 | 76.1 | 76.6 | 78.7 | 79.0 | 81.7 | 88.6 | 90.0 | 88.7 | 81.6 | 77.3 | 164.9 |
| 315 | 75.2 | 75.8 | 76.7 | 75.9 | 78.3 | 79.5 | 80.5 | 82.0 | 89.4 | 89.9 | 88.9 | 82.9 | 77.7 | 165.7 |
| 400 | 75.6 | 77.5 | 78.7 | 77.9 | 79.3 | 80.9 | 80.7 | 83.2 | 88.8 | 89.6 | 88.3 | 81.6 | 76.7 | 165.9 |
| 500 | 76.4 | 78.0 | 79.6 | 79.8 | 79.8 | 81.0 | 80.9 | 83.6 | 88.9 | 89.7 | 86.9 | 80.4 | 75.0 | 166.1 |
| 630 | 75.8 | 76.9 | 78.8 | 78.9 | 80.2 | 81.8 | 81.8 | 83.5 | 88.8 | 88.2 | 85.0 | 78.1 | 73.2 | 165.7 |
| 800 | 75.8 | 77.2 | 78.9 | 79.1 | 79.8 | 82.8 | 81.8 | 83.1 | 88.1 | 86.9 | 82.5 | 75.4 | 70.7 | 165.3 |
| 1000 | 74.6 | 76.7 | 79.4 | 79.2 | 80.7 | 81.8 | 81.6 | 83.0 | 86.5 | 85.9 | 81.6 | 75.6 | 70.2 | 165.2 |
| 1250 | 73.7 | 76.7 | 77.6 | 79.3 | 80.5 | 82.6 | 80.7 | 82.3 | 84.8 | 83.9 | 79.3 | 74.2 | 68.4 | 164.8 |
| 1600 | 72.7 | 75.5 | 77.6 | 78.2 | 79.3 | 80.7 | 79.6 | 80.7 | 83.3 | 83.0 | 77.7 | 72.1 | 66.9 | 165.0 |
| 2000 | 70.1 | 73.5 | 75.6 | 77.1 | 79.4 | 80.1 | 78.8 | 79.7 | 81.0 | 80.4 | 74.5 | 69.0 | 62.7 | 164.9 |
| 2500 | 68.0 | 72.6 | 75.0 | 75.6 | 79.3 | 79.1 | 75.9 | 77.1 | 77.8 | 73.6 | 67.0 | 60.9 | 54.5 | 164.5 |
| 3150 | 61.9 | 69.3 | 72.2 | 73.8 | 76.3 | 76.3 | 71.4 | 69.5 | 73.0 | 71.0 | 64.7 | 54.7 | 43.8 | 165.2 |
| 4000 | 53.9 | 59.9 | 64.9 | 66.1 | 67.5 | 68.0 | 65.8 | 64.3 | 66.2 | 61.9 | 54.1 | 41.2 | 25.5 | 164.3 |
| 5000 | 38.8 | 46.1 | 54.2 | 57.5 | 61.3 | 61.1 | 55.8 | 54.5 | 55.5 | 47.5 | 38.0 | 22.8 | | 164.1 |
| 6300 | 18.8 | 28.9 | 38.1 | 42.2 | 43.3 | 43.5 | 40.9 | 36.6 | 39.6 | 26.9 | 15.5 | | | 163.2 |
| 8000 | | | 8.2 | 15.6 | 16.6 | 18.0 | 17.0 | 10.4 | 11.7 | | | | | 161.5 |
| 10000 | | | | | | | | | | | | | | 159.7 |

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QASPL 86.4 87.9 89.6 89.6 91.4 92.4 91.8 93.5 99.3 100.3 99.9 95.1 88.7 178.3
PNL 93.3 96.2 98.4 98.9 101.4 102.0 100.3 101.5 105.4 105.6 103.6 97.3 91.5
PNLT 93.3 96.2 99.2 99.5 102.7 103.2 100.3 101.5 106.0 105.6 103.6 97.3 91.5

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 30.20
LOCATION C41 ANECH CH AERO. RDG. ADH955 PAMB 29.5600 RELHUM 43.80

MODEL TEST POINT 7604 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.96 M/SEC (387.0 FPS) FREE-JET SPEED

07/19/79 15.682

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. E. 70 PERCENT R.H. STD. DAY. SR 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMGDL X76050
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 86.0 | 90.8 | 89.6 | 90.1 | 90.5 | 93.3 | 98.2 | 97.1 | 101.6 | 106.7 | 110.8 | 114.5 | 114.1 | 147.6 |
| 315 | 87.1 | 90.2 | 89.9 | 90.7 | 92.8 | 94.4 | 95.6 | 97.2 | 104.2 | 108.8 | 112.9 | 116.3 | 114.5 | 149.2 |
| 400 | 88.4 | 91.0 | 91.2 | 91.5 | 92.9 | 95.0 | 96.4 | 98.0 | 105.5 | 112.8 | 115.9 | 118.1 | 115.0 | 151.4 |
| 500 | 90.0 | 92.3 | 92.8 | 92.9 | 94.4 | 96.3 | 97.4 | 98.9 | 106.6 | 114.1 | 117.8 | 119.2 | 115.6 | 152.7 |
| 630 | 91.1 | 93.2 | 94.2 | 94.0 | 100.1 | 97.7 | 98.8 | 101.2 | 108.2 | 114.8 | 118.4 | 119.1 | 116.0 | 153.1 |
| 800 | 95.7 | 94.5 | 95.2 | 95.8 | 96.1 | 98.2 | 100.4 | 103.0 | 110.2 | 115.6 | 119.4 | 119.4 | 116.3 | 153.9 |
| 1000 | 98.8 | 100.1 | 100.1 | 99.1 | 98.7 | 100.1 | 101.5 | 103.6 | 110.9 | 114.7 | 119.3 | 119.2 | 115.9 | 153.8 |
| 1250 | 95.9 | 100.0 | 100.2 | 100.3 | 101.3 | 102.2 | 103.1 | 105.3 | 111.1 | 114.3 | 120.2 | 119.1 | 114.2 | 154.0 |
| 1600 | 98.5 | 97.1 | 98.1 | 98.2 | 99.7 | 102.1 | 103.0 | 105.4 | 111.8 | 114.7 | 120.2 | 117.1 | 112.6 | 153.6 |
| 2000 | 99.7 | 100.5 | 99.7 | 98.7 | 99.1 | 100.7 | 102.1 | 105.2 | 112.1 | 115.1 | 119.0 | 114.7 | 110.5 | 152.8 |
| 2500 | 100.3 | 99.8 | 99.9 | 100.1 | 100.2 | 101.1 | 103.4 | 105.9 | 112.0 | 115.5 | 117.4 | 113.8 | 109.8 | 152.2 |
| 3150 | 99.0 | 100.6 | 99.8 | 100.3 | 100.4 | 101.5 | 103.4 | 106.3 | 112.0 | 114.7 | 115.9 | 112.1 | 107.8 | 151.3 |
| 4000 | 97.8 | 98.6 | 99.1 | 98.8 | 99.7 | 101.8 | 102.7 | 106.1 | 110.7 | 114.2 | 113.9 | 110.6 | 106.1 | 150.3 |
| 5000 | 96.1 | 97.9 | 98.4 | 98.4 | 100.0 | 101.8 | 103.2 | 105.4 | 110.3 | 113.8 | 112.7 | 108.9 | 105.3 | 149.7 |
| 6300 | 94.5 | 97.3 | 98.3 | 98.8 | 99.6 | 102.0 | 103.2 | 105.6 | 109.5 | 112.4 | 111.5 | 107.8 | 105.3 | 149.1 |
| 8000 | 93.8 | 97.4 | 97.3 | 98.2 | 100.0 | 101.1 | 102.7 | 104.5 | 109.2 | 110.5 | 109.9 | 106.6 | 103.9 | 148.3 |
| 10000 | 92.4 | 96.7 | 97.6 | 97.5 | 99.6 | 101.8 | 101.4 | 104.0 | 107.3 | 109.5 | 108.0 | 105.6 | 102.7 | 147.6 |
| 12500 | 89.9 | 95.0 | 95.9 | 97.1 | 98.9 | 100.3 | 100.5 | 102.6 | 104.9 | 106.9 | 105.6 | 103.3 | 101.5 | 146.4 |
| 16000 | 88.2 | 93.6 | 95.2 | 96.3 | 98.5 | 99.5 | 98.2 | 100.8 | 102.4 | 105.1 | 103.6 | 101.4 | 98.4 | 146.1 |
| 20000 | 82.9 | 90.9 | 91.7 | 94.1 | 97.9 | 98.3 | 95.6 | 97.5 | 99.7 | 101.5 | 100.2 | 98.3 | 97.3 | 145.1 |
| 25000 | 82.2 | 87.2 | 89.0 | 90.6 | 95.3 | 95.7 | 93.0 | 92.4 | 97.0 | 97.0 | 96.4 | 94.4 | 94.3 | 144.0 |
| 31500 | 80.5 | 83.3 | 87.2 | 89.4 | 90.2 | 90.0 | 89.7 | 89.9 | 93.3 | 95.3 | 93.4 | 89.2 | 88.8 | 143.8 |
| 40000 | 75.8 | 79.0 | 82.2 | 83.9 | 86.0 | 87.9 | 84.5 | 85.0 | 88.7 | 90.3 | 87.6 | 84.7 | 85.0 | 143.4 |
| 50000 | 68.6 | 72.1 | 75.0 | 77.8 | 79.8 | 81.0 | 80.0 | 78.1 | 84.1 | 84.0 | 82.1 | 79.7 | 78.6 | 141.7 |
| 63000 | 63.0 | 65.1 | 68.7 | 71.4 | 72.3 | 72.7 | 74.0 | 72.3 | 80.1 | 78.3 | 76.6 | 74.2 | 73.8 | 141.4 |
| 80000 | 57.5 | 59.0 | 63.0 | 66.2 | 66.0 | 66.9 | 67.2 | 67.1 | 73.6 | 73.1 | 73.2 | 67.7 | 66.6 | 142.5 |
| GASPL | 108.6 | 110.2 | 110.4 | 110.6 | 111.9 | 113.3 | 114.3 | 116.7 | 122.3 | 126.1 | 129.2 | 128.5 | 125.2 | 164.4 |

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TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAMB 30.29
LOCATION C41 ANECH CH AERO. RDG. ADH073 PAMB 29.2960 RELHUM 18.50

MODEL TEST POINT 7605 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CH (23.99 SQ IN) - MODEL 0. FREE-JET SPEED 0. M/SEC (0. FPS)

68
55

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
 59.0 DEG. F. 70 PERCENT R.H. SID. DAY. SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X76050

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 86.0 | 90.6 | 89.6 | 90.1 | 90.5 | 93.3 | 96.2 | 97.1 | 101.6 | 106.7 | 110.8 | 114.5 | 114.1 | 147.6 |
| 315 | 87.1 | 90.2 | 89.9 | 90.7 | 92.8 | 94.4 | 95.6 | 97.2 | 104.2 | 108.8 | 112.9 | 116.3 | 114.5 | 149.2 |
| 400 | 88.4 | 91.0 | 91.2 | 91.5 | 92.9 | 95.0 | 96.4 | 98.0 | 105.5 | 112.8 | 115.9 | 118.1 | 115.0 | 151.4 |
| 500 | 90.0 | 92.3 | 92.8 | 92.9 | 94.4 | 96.3 | 97.4 | 98.9 | 106.6 | 114.1 | 117.8 | 119.2 | 115.6 | 152.7 |
| 630 | 91.1 | 93.2 | 94.2 | 94.0 | 100.1 | 97.7 | 98.8 | 101.2 | 108.2 | 114.8 | 118.4 | 119.1 | 116.0 | 153.1 |
| 800 | 95.7 | 94.5 | 95.2 | 95.8 | 96.1 | 98.2 | 100.4 | 103.0 | 110.2 | 115.6 | 119.4 | 119.4 | 116.3 | 153.9 |
| 1000 | 98.6 | 100.1 | 100.1 | 99.1 | 98.7 | 100.1 | 101.5 | 103.6 | 110.9 | 114.7 | 119.3 | 119.2 | 115.9 | 153.8 |
| 1250 | 95.9 | 100.0 | 100.2 | 100.3 | 101.3 | 102.2 | 103.1 | 105.3 | 111.1 | 114.3 | 120.2 | 119.1 | 114.2 | 154.0 |
| 1600 | 98.5 | 97.1 | 98.1 | 98.2 | 99.7 | 102.1 | 103.0 | 105.4 | 111.8 | 114.7 | 120.2 | 117.1 | 112.6 | 153.6 |
| 2000 | 99.7 | 100.5 | 99.7 | 98.7 | 99.1 | 100.7 | 102.1 | 105.2 | 112.1 | 115.1 | 119.0 | 114.7 | 110.5 | 152.8 |
| 2500 | 100.3 | 99.8 | 99.9 | 100.1 | 100.2 | 101.1 | 103.4 | 105.9 | 112.0 | 115.5 | 117.4 | 113.8 | 108.8 | 152.2 |
| 3150 | 99.0 | 100.6 | 99.8 | 100.3 | 100.4 | 101.5 | 103.4 | 106.3 | 112.0 | 114.7 | 115.9 | 112.1 | 107.8 | 151.3 |
| 4000 | 97.8 | 98.6 | 99.1 | 98.8 | 99.7 | 101.8 | 102.7 | 106.1 | 110.7 | 114.2 | 113.9 | 110.6 | 106.1 | 150.3 |
| 5000 | 96.1 | 97.9 | 98.4 | 98.4 | 100.0 | 101.8 | 103.2 | 105.4 | 110.3 | 113.8 | 112.7 | 108.9 | 105.3 | 149.7 |
| 6300 | 94.5 | 97.3 | 98.3 | 98.8 | 99.6 | 102.0 | 103.2 | 105.6 | 109.5 | 112.4 | 111.5 | 107.8 | 105.3 | 149.1 |
| 8000 | 93.8 | 97.4 | 97.3 | 98.2 | 100.0 | 101.1 | 102.7 | 104.5 | 109.2 | 110.5 | 109.9 | 106.6 | 103.9 | 148.3 |
| 10000 | 92.4 | 96.7 | 97.6 | 97.5 | 99.6 | 101.8 | 101.4 | 104.0 | 107.3 | 109.5 | 108.0 | 105.6 | 102.7 | 147.6 |
| 12500 | 89.9 | 95.0 | 95.9 | 97.1 | 98.9 | 100.3 | 100.5 | 102.6 | 104.9 | 106.9 | 105.6 | 103.3 | 101.5 | 146.4 |
| 16000 | 88.2 | 93.6 | 95.2 | 96.3 | 98.5 | 99.5 | 98.2 | 100.8 | 102.4 | 105.1 | 103.6 | 101.4 | 99.4 | 146.1 |
| 20000 | 82.9 | 90.9 | 91.7 | 94.1 | 97.9 | 98.3 | 95.6 | 97.5 | 99.7 | 101.5 | 100.2 | 98.3 | 97.3 | 145.1 |
| 25000 | 82.2 | 87.2 | 89.0 | 90.6 | 95.3 | 95.7 | 93.0 | 92.4 | 97.0 | 97.0 | 96.4 | 94.4 | 94.3 | 144.0 |
| 31500 | 80.5 | 83.3 | 87.2 | 89.4 | 90.2 | 90.0 | 89.7 | 89.9 | 93.3 | 95.3 | 93.4 | 89.2 | 88.8 | 143.8 |
| 40000 | 75.8 | 79.0 | 82.2 | 83.9 | 88.0 | 87.9 | 84.5 | 85.0 | 88.7 | 90.3 | 87.6 | 84.7 | 85.0 | 143.4 |
| 50000 | 68.6 | 72.1 | 75.0 | 77.8 | 79.8 | 81.0 | 80.0 | 78.1 | 84.0 | 82.1 | 79.7 | 78.6 | 78.6 | 141.7 |
| 63000 | 63.0 | 66.1 | 68.7 | 71.4 | 72.3 | 72.7 | 74.0 | 72.3 | 80.1 | 78.3 | 76.6 | 74.2 | 73.8 | 141.4 |
| 80000 | 57.5 | 59.0 | 63.0 | 66.2 | 68.0 | 66.9 | 67.2 | 67.1 | 73.6 | 73.1 | 73.2 | 67.7 | 66.6 | 142.5 |
| OASPL | 108.6 | 110.2 | 110.4 | 110.6 | 111.9 | 113.3 | 114.3 | 116.7 | 122.3 | 126.1 | 129.2 | 128.5 | 125.2 | 164.4 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | REFRACTION CORRECTION - YES |
|------------------------------|------------------------------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 02-20-78 | TAPE NO. | N294 | ALPHA | SB59 | TAMB | 30.29 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH073 | PAMB | 29.2960 | RELHUM | 18.50 |

| MODEL | TEST POINT | ACQUSTIC RANGE | SIZE | FREE-JET SPEED |
|-------|------------|-----------------------|------------------------------------|--------------------|
| 7600 | 7605 | 12.2 M (40.0 FT) ARC | 154.7 SQ CM (23.99 SQ IN) - MODEL | 0. M/SEC (0. FPS) |

07/19/79 19.682

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F. 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X76051

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 66.6 | 70.7 | 72.1 | 73.1 | 74.8 | 77.1 | 78.3 | 79.6 | 86.3 | 92.6 | 94.2 | 94.1 | 87.7 | 169.1 |
| 63 | 68.2 | 72.0 | 73.6 | 74.4 | 76.4 | 78.4 | 79.4 | 80.4 | 87.4 | 93.9 | 96.0 | 95.2 | 88.2 | 170.4 |
| 80 | 69.3 | 72.9 | 75.0 | 75.5 | 78.0 | 79.7 | 80.7 | 82.7 | 89.0 | 94.5 | 96.5 | 95.0 | 88.5 | 170.8 |
| 100 | 73.7 | 74.1 | 76.0 | 77.2 | 78.0 | 82.0 | 82.2 | 84.5 | 91.0 | 95.2 | 97.5 | 95.2 | 88.6 | 171.6 |
| 125 | 76.7 | 79.6 | 80.7 | 80.5 | 80.5 | 82.0 | 83.2 | 85.0 | 91.5 | 94.2 | 97.2 | 94.9 | 88.0 | 171.4 |
| 160 | 73.7 | 79.3 | 80.7 | 81.5 | 83.0 | 84.0 | 84.7 | 86.5 | 91.6 | 93.7 | 97.9 | 94.5 | 86.0 | 171.7 |
| 200 | 76.0 | 76.3 | 78.5 | 79.2 | 81.2 | 83.7 | 84.5 | 86.5 | 92.1 | 93.9 | 97.7 | 92.2 | 83.9 | 171.3 |
| 250 | 76.8 | 79.3 | 79.6 | 79.6 | 80.4 | 82.1 | 83.4 | 86.1 | 92.2 | 94.0 | 96.2 | 89.4 | 81.1 | 170.4 |
| 315 | 77.1 | 78.4 | 79.6 | 80.7 | 81.2 | 82.2 | 84.5 | 86.4 | 91.8 | 94.0 | 94.2 | 87.9 | 78.7 | 169.8 |
| 400 | 75.3 | 78.7 | 79.3 | 80.6 | 81.2 | 82.4 | 84.1 | 86.6 | 91.4 | 92.8 | 92.1 | 85.5 | 76.7 | 169.0 |
| 500 | 73.6 | 76.3 | 78.2 | 78.8 | 80.1 | 82.4 | 83.1 | 86.1 | 89.8 | 92.0 | 89.7 | 83.4 | 73.9 | 167.9 |
| 630 | 71.3 | 75.2 | 77.2 | 78.1 | 80.1 | 82.2 | 83.4 | 85.1 | 89.1 | 91.1 | 88.0 | 81.0 | 72.1 | 167.4 |
| 800 | 69.3 | 74.3 | 76.8 | 78.2 | 79.6 | 82.1 | 83.1 | 85.0 | 87.9 | 89.4 | 86.3 | 79.3 | 70.9 | 166.7 |
| 1000 | 68.2 | 74.1 | 75.5 | 77.4 | 79.8 | 81.1 | 82.5 | 83.7 | 87.4 | 87.2 | 84.2 | 77.3 | 68.4 | 165.9 |
| 1250 | 66.3 | 73.1 | 75.6 | 76.6 | 79.3 | 81.6 | 81.1 | 83.0 | 85.3 | 85.8 | 81.8 | 75.5 | 65.8 | 165.3 |
| 1600 | 62.9 | 70.8 | 73.5 | 75.8 | 78.2 | 79.9 | 79.8 | 81.3 | 82.5 | 82.6 | 78.6 | 71.8 | 62.2 | 164.1 |
| 2000 | 60.2 | 68.8 | 72.4 | 74.8 | 77.7 | 79.0 | 77.4 | 79.3 | 79.6 | 80.3 | 75.6 | 68.4 | 57.1 | 163.7 |
| 2500 | 53.1 | 64.9 | 68.0 | 71.9 | 76.6 | 77.2 | 74.3 | 75.3 | 76.1 | 75.4 | 70.4 | 62.4 | 50.1 | 162.7 |
| 3150 | 49.1 | 58.7 | 63.4 | 66.9 | 72.5 | 73.3 | 70.2 | 68.7 | 71.4 | 68.5 | 63.3 | 53.6 | 38.7 | 161.7 |
| 4000 | 41.1 | 50.0 | 57.8 | 62.4 | 64.5 | 64.7 | 60.0 | 62.9 | 63.9 | 62.0 | 54.0 | 39.5 | 18.7 | 161.4 |
| 5000 | 26.6 | 38.2 | 46.6 | 51.5 | 57.3 | 57.8 | 53.8 | 52.6 | 53.1 | 49.5 | 38.4 | 21.3 | | 161.0 |
| 6300 | 1.7 | 17.0 | 27.3 | 34.6 | 39.0 | 41.0 | 39.2 | 34.9 | 36.4 | 29.0 | 15.2 | | | 159.3 |
| 8000 | | | | 9.0 | 13.4 | 14.9 | 15.1 | 9.9 | 11.1 | | | | | 159.0 |
| 10000 | | | | | | | | | | | | | | 160.1 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| GASPL | 85.4 | 88.4 | 89.9 | 90.9 | 92.5 | 94.0 | 94.9 | 96.9 | 101.9 | 104.7 | 106.5 | 103.5 | 96.3 | 181.9 |
| PWL | 89.5 | 93.8 | 95.9 | 97.7 | 100.5 | 101.7 | 101.4 | 103.0 | 107.1 | 108.6 | 108.9 | 103.8 | 95.7 | |
| PWL | 90.7 | 94.8 | 95.9 | 97.7 | 101.8 | 102.8 | 102.0 | 103.0 | 107.1 | 108.8 | 108.9 | 103.8 | 95.7 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-20-78 TAPE NO. N294 IALPHA SB59 TAMB 30.29
LOCATION C41 ANECH CH AERO. RDG. ADH073 PAMB 29.2960 RELHUM 16.50

MODEL TEST POINT 7605 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. FREE-JET SPEED
7600 7605 H/SEC (0. FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X76060
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 81.8 | 84.3 | 83.8 | 85.7 | 86.3 | 86.4 | 90.6 | 93.3 | 97.5 | 102.6 | 107.8 | 111.5 | 110.4 | 144.2 |
| 315 | 83.5 | 84.3 | 85.0 | 85.1 | 86.9 | 89.3 | 89.9 | 92.9 | 99.1 | 105.0 | 109.4 | 112.3 | 110.5 | 145.3 |
| 400 | 84.8 | 85.6 | 86.4 | 86.1 | 87.5 | 89.9 | 91.5 | 93.7 | 100.7 | 108.5 | 112.4 | 113.8 | 108.8 | 147.1 |
| 500 | 85.7 | 85.9 | 88.0 | 87.8 | 89.6 | 91.5 | 92.4 | 94.8 | 102.0 | 110.1 | 114.0 | 113.7 | 106.1 | 147.9 |
| 630 | 86.8 | 87.1 | 88.8 | 88.6 | 89.5 | 92.6 | 93.7 | 97.4 | 104.9 | 111.2 | 114.8 | 113.0 | 102.7 | 148.5 |
| 800 | 89.1 | 87.4 | 89.4 | 90.2 | 91.5 | 94.1 | 95.3 | 98.9 | 106.7 | 111.7 | 115.4 | 112.0 | 101.0 | 148.8 |
| 1000 | 89.7 | 89.5 | 90.7 | 90.3 | 92.1 | 95.0 | 96.4 | 100.0 | 107.8 | 111.3 | 114.7 | 108.9 | 98.8 | 148.1 |
| 1250 | 89.0 | 91.1 | 92.6 | 92.6 | 93.5 | 96.3 | 97.2 | 101.4 | 108.0 | 110.4 | 115.1 | 107.2 | 97.4 | 148.1 |
| 1600 | 94.9 | 93.0 | 92.3 | 92.5 | 94.4 | 97.2 | 98.1 | 102.0 | 108.4 | 110.8 | 114.3 | 106.5 | 97.5 | 147.9 |
| 2000 | 97.3 | 97.1 | 95.6 | 93.9 | 93.7 | 96.8 | 98.2 | 102.1 | 109.5 | 112.0 | 113.2 | 104.6 | 96.9 | 147.9 |
| 2500 | 97.0 | 97.8 | 98.3 | 98.1 | 96.6 | 97.2 | 99.4 | 102.8 | 108.9 | 112.2 | 112.8 | 105.3 | 97.0 | 148.0 |
| 3150 | 95.1 | 95.6 | 96.9 | 97.6 | 99.0 | 99.8 | 99.7 | 103.9 | 110.3 | 111.5 | 112.7 | 105.9 | 97.6 | 148.2 |
| 4000 | 93.4 | 93.8 | 95.1 | 95.8 | 97.4 | 100.0 | 100.1 | 104.0 | 109.5 | 111.2 | 111.3 | 104.2 | 96.5 | 147.5 |
| 5000 | 93.6 | 93.8 | 94.8 | 94.8 | 95.8 | 99.2 | 101.1 | 104.3 | 109.4 | 111.7 | 110.6 | 103.5 | 96.2 | 147.6 |
| 6300 | 93.8 | 94.2 | 95.0 | 95.2 | 95.9 | 99.6 | 100.2 | 104.2 | 109.4 | 110.6 | 108.4 | 102.1 | 95.3 | 147.0 |
| 8000 | 93.5 | 94.8 | 94.9 | 95.2 | 96.5 | 98.6 | 99.9 | 103.8 | 108.5 | 109.5 | 106.9 | 100.3 | 94.3 | 146.5 |
| 10000 | 92.8 | 94.3 | 94.9 | 95.2 | 97.1 | 99.7 | 99.1 | 103.4 | 107.6 | 108.4 | 105.2 | 100.5 | 93.6 | 146.2 |
| 12500 | 91.7 | 93.5 | 94.1 | 94.9 | 96.4 | 98.3 | 98.3 | 101.7 | 105.4 | 105.3 | 103.1 | 98.8 | 93.0 | 145.1 |
| 16000 | 90.1 | 92.5 | 93.8 | 94.8 | 96.4 | 98.2 | 96.6 | 100.3 | 103.0 | 104.9 | 101.1 | 96.8 | 91.5 | 145.0 |
| 20000 | 86.1 | 90.4 | 90.6 | 92.4 | 95.7 | 97.0 | 94.4 | 97.3 | 99.9 | 100.8 | 97.6 | 94.5 | 89.7 | 143.9 |
| 25000 | 85.2 | 87.0 | 89.2 | 89.2 | 93.1 | 95.2 | 91.8 | 92.8 | 97.5 | 96.4 | 92.8 | 90.2 | 88.8 | 143.1 |
| 31500 | 84.0 | 84.0 | 86.7 | 88.3 | 88.6 | 89.6 | 88.8 | 89.8 | 93.0 | 94.5 | 91.1 | 85.8 | 83.1 | 142.8 |
| 40000 | 78.8 | 78.7 | 82.0 | 83.4 | 86.3 | 87.8 | 83.4 | 84.7 | 88.5 | 88.3 | 86.1 | 80.6 | 78.5 | 142.3 |
| 50000 | 71.9 | 72.6 | 74.3 | 77.0 | 78.6 | 80.4 | 78.8 | 77.8 | 83.9 | 81.3 | 79.4 | 76.0 | 72.4 | 140.4 |
| 63000 | 66.1 | 66.4 | 68.0 | 70.6 | 70.7 | 71.8 | 72.6 | 71.2 | 78.9 | 74.3 | 72.9 | 69.8 | 66.3 | 139.4 |
| 80000 | 60.3 | 59.0 | 62.3 | 65.4 | 63.6 | 67.0 | 65.0 | 65.0 | 71.7 | 68.4 | 66.6 | 60.5 | 58.4 | 139.6 |
| GASPL | 105.5 | 106.0 | 106.7 | 106.9 | 108.3 | 110.3 | 110.8 | 114.5 | 120.2 | 123.0 | 125.0 | 121.8 | 116.3 | 160.5 |

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TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 33.08
LOCATION C41 ANECH CH AERO. RDG. ADH994 PAMB 29.5700 RELHUM 43.70

MODEL TEST POINT 7606 ACQUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.96 M/SEC (387.0 FPS)
FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X76060

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PHL

| | | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|
| 50 | 59.2 | 60.3 | 68.4 | 68.6 | 67.6 | 68.4 | 68.6 | 69.6 | 69.6 | 95.6 | 100.7 | 104.6 | 108.0 | 107.9 | 141.4 |
| 63 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 80 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 100 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 125 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 160 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 200 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 250 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 315 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 400 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 500 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 630 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 800 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 1000 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 1250 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 1600 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 2000 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 2500 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 3150 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 4000 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 5000 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 6300 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 8000 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 10000 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 12500 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 16000 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 20000 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 25000 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 31500 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 40000 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 50000 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 63000 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |
| 80000 | 69.2 | 90.3 | 68.4 | 68.6 | 68.6 | 69.6 | 69.6 | 69.6 | 69.6 | 90.2 | 98.6 | 105.6 | 109.3 | 111.5 | 108.9 |

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GASPL 112.1 111.8 111.5 110.7 111.7 112.7 111.7 114.0 120.4 122.4 124.1 122.2 120.1 161.2

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 387.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 33.08
LOCATION C41 ANECH CH AERO. RDG. ADH994 PAMB 29.5700 RELHUM 43.70

MODEL TEST POINT 7606 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.96 M/SEC (387.0 FPS)
SIZE

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X76061

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 68.9 | 70.0 | 70.5 | 69.8 | 71.1 | 72.2 | 72.7 | 73.4 | 81.1 | 87.7 | 90.2 | 89.1 | 81.6 | 164.3 |
| 63 | 69.4 | 70.8 | 71.5 | 70.7 | 73.4 | 73.8 | 73.6 | 74.5 | 83.8 | 88.7 | 91.1 | 89.1 | 80.0 | 164.9 |
| 80 | 71.2 | 71.8 | 73.6 | 72.6 | 79.8 | 75.0 | 74.7 | 76.8 | 85.9 | 89.6 | 92.2 | 89.4 | 80.9 | 165.9 |
| 100 | 74.9 | 75.1 | 76.0 | 74.5 | 75.3 | 76.6 | 76.3 | 78.3 | 87.3 | 89.5 | 92.0 | 87.3 | 81.0 | 165.6 |
| 125 | 74.4 | 73.1 | 74.9 | 75.0 | 75.9 | 77.5 | 77.4 | 79.4 | 87.4 | 88.5 | 92.1 | 85.3 | 79.2 | 165.2 |
| 160 | 74.5 | 74.9 | 76.0 | 74.9 | 77.3 | 78.9 | 78.2 | 80.7 | 87.9 | 89.0 | 91.4 | 84.6 | 79.2 | 165.2 |
| 200 | 73.9 | 76.5 | 77.9 | 77.3 | 77.8 | 79.8 | 79.2 | 81.4 | 89.0 | 89.9 | 90.0 | 82.2 | 77.8 | 165.1 |
| 250 | 77.1 | 76.4 | 76.0 | 76.2 | 77.0 | 79.5 | 79.3 | 81.5 | 88.6 | 90.3 | 89.8 | 83.0 | 78.0 | 165.5 |
| 315 | 80.4 | 80.9 | 79.5 | 77.4 | 79.9 | 79.9 | 80.5 | 82.2 | 90.2 | 89.9 | 89.9 | 83.8 | 78.6 | 166.6 |
| 400 | 78.3 | 80.3 | 81.4 | 81.3 | 82.8 | 82.6 | 81.0 | 83.5 | 89.5 | 89.7 | 88.5 | 81.7 | 76.5 | 166.5 |
| 500 | 78.1 | 79.8 | 81.3 | 81.8 | 81.3 | 83.0 | 81.6 | 83.8 | 89.4 | 89.9 | 87.1 | 80.0 | 74.7 | 166.6 |
| 630 | 76.0 | 77.5 | 79.3 | 79.9 | 80.0 | 82.5 | 82.7 | 84.0 | 89.0 | 88.4 | 84.4 | 78.0 | 72.6 | 165.8 |
| 800 | 75.6 | 77.3 | 78.9 | 78.9 | 79.8 | 82.9 | 81.8 | 83.7 | 88.0 | 82.6 | 75.5 | 70.5 | 165.3 | |
| 1000 | 75.2 | 77.2 | 78.7 | 79.0 | 80.3 | 81.6 | 81.2 | 83.1 | 87.2 | 86.0 | 80.9 | 75.6 | 165.2 | |
| 1250 | 74.3 | 77.3 | 78.2 | 78.7 | 80.7 | 82.6 | 80.4 | 82.7 | 85.4 | 84.3 | 79.2 | 74.3 | 165.1 | |
| 1600 | 72.4 | 75.9 | 77.6 | 78.1 | 79.8 | 80.9 | 79.6 | 81.0 | 83.3 | 83.0 | 77.1 | 71.7 | 164.9 | |
| 2000 | 69.8 | 74.0 | 75.9 | 77.0 | 78.6 | 80.6 | 77.9 | 79.5 | 81.2 | 79.8 | 74.1 | 69.2 | 164.8 | |
| 2500 | 65.9 | 71.4 | 74.2 | 75.8 | 78.8 | 78.9 | 76.4 | 76.5 | 77.1 | 73.2 | 66.1 | 60.3 | 164.0 | |
| 3150 | 60.7 | 68.4 | 70.2 | 72.4 | 74.9 | 75.8 | 70.6 | 69.3 | 72.8 | 71.1 | 63.8 | 54.0 | 164.4 | |
| 4000 | 52.8 | 59.5 | 64.3 | 65.2 | 66.8 | 67.3 | 65.4 | 64.1 | 66.0 | 61.8 | 54.0 | 41.1 | 163.8 | |
| 5000 | 38.3 | 46.0 | 53.0 | 56.9 | 60.2 | 60.6 | 55.1 | 54.1 | 55.6 | 47.7 | 38.0 | 22.4 | 163.6 | |
| 6300 | 17.6 | 28.3 | 37.5 | 41.8 | 42.4 | 43.3 | 40.5 | 36.4 | 39.3 | 27.2 | 14.5 | | 162.8 | |
| 8000 | | | 7.5 | 15.2 | 15.7 | 17.0 | 16.1 | 10.5 | 11.8 | | | | 161.1 | |
| 10000 | | | | | | | | | | | | | 159.3 | |

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OF POOR QUALITY

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|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| GASPL | 87.8 | 89.2 | 90.3 | 90.3 | 91.8 | 93.0 | 91.9 | 93.8 | 99.8 | 100.7 | 101.3 | 96.7 | 89.9 | 178.7 |
| PNL | 93.9 | 96.6 | 98.4 | 99.2 | 101.4 | 102.1 | 100.0 | 101.6 | 105.7 | 105.8 | 104.2 | 98.2 | 92.1 | |
| PNLT | 93.9 | 96.6 | 99.2 | 99.8 | 102.6 | 103.3 | 100.6 | 101.6 | 106.4 | 105.8 | 104.2 | 98.2 | 92.1 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

| | | | | | | | |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | SB59 | TAMB | 33.08 |
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH994 | PAMB | 29.5700 | RELHUM | 43.70 |

| | | | | |
|-------|------------|-------------------------|-------------------------------------|---------------------------|
| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
| 7600 | 7606 | 731.5 M (2400.0 FT) SL | 9032.2 SQ CM (1400.00 SQ IN) - FULL | 117.96 M/SEC (387.0 FPS) |

08/30/79 19.452

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FM0DL X76070
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PVL

FREQ

50

63

80

100

125

160

200

250 85.8 91.1 89.6 90.4 90.7 93.3 95.2 97.4 102.6 107.4 111.6 116.0 114.4 148.1
315 87.4 90.2 90.7 92.1 94.9 95.6 98.0 104.9 110.0 113.6 116.3 115.2 149.7
400 88.7 91.4 92.0 91.2 92.6 95.0 96.3 98.7 106.5 113.3 116.4 118.1 115.3 151.7
500 90.0 92.3 93.3 93.1 93.9 96.5 97.4 99.8 107.3 114.9 118.0 118.4 115.3 152.7
630 90.6 93.4 93.6 94.2 98.0 97.6 98.8 101.7 110.1 116.0 118.6 118.8 115.9 153.5
800 94.6 94.2 95.2 96.0 96.3 98.9 100.1 103.5 111.2 116.8 119.4 119.1 116.0 154.1
1000 97.2 98.8 98.8 98.1 97.7 100.0 101.2 104.3 112.3 116.6 119.0 118.7 115.1 153.9
1250 94.6 98.6 98.7 99.2 99.6 102.1 102.3 105.9 112.3 117.2 120.6 118.8 113.9 154.7
1600 96.9 96.5 97.3 97.8 99.2 101.8 102.7 106.3 113.2 116.7 120.4 117.8 113.1 154.3
2000 97.1 99.9 98.9 98.4 98.3 100.9 102.5 105.9 113.8 117.5 119.0 115.4 110.2 153.7
2500 97.0 99.1 99.1 99.7 101.6 103.4 106.9 113.5 118.2 117.1 114.1 108.3 153.2
3150 98.6 100.4 100.2 99.7 99.7 102.1 104.2 107.7 113.6 116.3 116.0 113.4 107.9 152.3
4000 98.9 100.3 100.3 99.5 99.3 101.9 103.6 106.8 113.2 115.4 114.6 111.0 106.0 151.4
5000 99.0 101.4 101.9 100.9 100.7 102.3 103.9 107.1 112.8 115.1 113.4 110.1 105.6 151.2
6300 96.8 100.7 102.2 102.4 101.9 103.8 104.2 106.9 112.1 114.1 112.4 109.6 105.1 150.8
8000 95.4 99.8 100.9 101.8 102.9 103.5 103.6 106.4 111.3 112.7 110.8 107.9 103.7 150.1
10000 93.8 98.7 100.1 100.9 102.8 104.9 103.8 106.1 109.7 111.3 109.4 107.2 102.8 149.7
12500 91.6 97.0 98.4 100.0 101.3 103.5 102.7 104.8 107.4 109.2 107.1 105.2 101.4 148.7
16000 89.6 95.1 97.7 98.6 101.7 102.7 100.9 103.5 105.5 107.7 104.6 102.8 99.6 148.5
20000 84.6 92.7 94.5 96.3 100.6 101.5 98.6 100.4 102.3 103.8 101.5 99.7 97.2 147.5
25000 83.7 88.5 91.8 92.9 97.2 98.6 95.9 95.7 99.5 99.6 97.4 95.6 94.7 146.4
31500 82.2 85.0 89.5 91.4 92.0 92.7 92.1 92.9 95.3 97.6 94.7 90.7 89.0 145.9
40000 76.5 80.0 84.2 85.4 90.2 90.7 86.7 87.5 90.5 92.9 89.1 85.5 84.9 145.5
50000 69.5 73.1 76.1 79.0 81.5 82.7 81.4 80.6 86.6 86.6 84.4 80.9 78.1 143.7
63000 63.7 66.1 69.8 72.4 73.2 74.4 76.2 74.5 82.7 80.4 78.6 75.1 73.0 143.3
80000 57.4 59.7 64.2 67.7 66.9 69.1 69.3 69.5 76.4 75.4 73.6 67.8 65.8 144.4

OASPL 108.2 110.9 111.5 111.7 112.8 114.6 115.0 118.0 124.0 127.8 129.4 128.5 125.1 165.3

TEST DATE 02-21-78 TAPE NO. N294 ALPHA SB59 TAMB 23.00
LOCATION C41 ANECH CH AERO. RDG. ADH088 PAMB 29.3630 RELHUM 45.00

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED
7600 7607 M/SEC (0. FPS)

691

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OF POOR QUALITY

08/30/79 19.452

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X76070

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 85.8 | 91.1 | 89.8 | 90.4 | 90.7 | 93.3 | 95.2 | 97.4 | 102.6 | 107.4 | 111.5 | 115.0 | 114.4 | 148.1 |
| 315 | 87.4 | 90.2 | 90.7 | 92.1 | 92.1 | 94.9 | 95.6 | 98.0 | 104.9 | 110.0 | 113.6 | 116.3 | 115.2 | 149.7 |
| 400 | 88.7 | 91.4 | 92.0 | 91.2 | 92.6 | 95.0 | 96.3 | 98.7 | 106.5 | 113.3 | 116.4 | 118.1 | 115.3 | 151.7 |
| 500 | 90.0 | 92.3 | 93.3 | 93.1 | 93.9 | 96.5 | 97.4 | 99.8 | 107.3 | 114.9 | 118.0 | 118.4 | 115.3 | 152.7 |
| 630 | 90.6 | 93.4 | 93.6 | 94.2 | 98.0 | 97.6 | 98.8 | 101.7 | 110.1 | 116.0 | 118.6 | 118.8 | 115.9 | 153.5 |
| 800 | 94.6 | 94.2 | 95.2 | 96.0 | 96.3 | 98.3 | 100.1 | 103.5 | 111.2 | 116.8 | 119.4 | 119.1 | 116.0 | 154.1 |
| 1000 | 97.2 | 98.8 | 98.8 | 98.1 | 97.7 | 100.0 | 101.2 | 104.3 | 112.3 | 116.6 | 119.0 | 118.7 | 115.1 | 153.9 |
| 1250 | 94.6 | 98.6 | 98.7 | 99.8 | 99.8 | 102.1 | 102.3 | 105.9 | 112.3 | 116.2 | 120.6 | 118.8 | 113.9 | 154.7 |
| 1600 | 96.9 | 96.5 | 97.3 | 97.6 | 99.2 | 101.8 | 102.7 | 106.3 | 113.2 | 116.7 | 120.4 | 117.8 | 113.1 | 154.3 |
| 2000 | 97.1 | 99.9 | 98.9 | 99.4 | 98.3 | 100.9 | 102.6 | 105.9 | 113.8 | 117.5 | 119.0 | 115.4 | 110.2 | 153.7 |
| 2500 | 97.0 | 99.1 | 99.1 | 99.1 | 99.7 | 101.6 | 103.4 | 106.9 | 113.5 | 118.2 | 117.1 | 114.1 | 108.3 | 153.2 |
| 3150 | 98.6 | 100.4 | 100.2 | 99.7 | 99.7 | 102.1 | 104.2 | 107.7 | 113.6 | 116.3 | 116.0 | 113.4 | 107.9 | 152.3 |
| 4000 | 98.9 | 100.3 | 100.3 | 99.5 | 99.3 | 101.9 | 103.6 | 106.8 | 113.2 | 115.4 | 114.6 | 111.0 | 106.0 | 151.4 |
| 5000 | 99.0 | 101.4 | 101.9 | 100.9 | 100.7 | 102.3 | 103.9 | 107.1 | 112.8 | 115.1 | 113.4 | 110.1 | 105.6 | 151.2 |
| 6300 | 96.8 | 100.7 | 102.2 | 102.4 | 101.9 | 103.8 | 104.2 | 106.9 | 112.1 | 114.1 | 112.4 | 109.6 | 105.1 | 150.8 |
| 8000 | 95.4 | 99.8 | 100.9 | 101.8 | 102.9 | 103.5 | 103.6 | 106.4 | 111.3 | 112.7 | 110.8 | 107.9 | 103.7 | 150.1 |
| 10000 | 93.8 | 98.7 | 100.1 | 100.9 | 102.8 | 104.9 | 103.8 | 106.1 | 109.7 | 111.3 | 109.4 | 107.2 | 102.8 | 149.7 |
| 12500 | 91.8 | 97.0 | 98.4 | 100.0 | 101.3 | 103.6 | 102.7 | 104.8 | 107.4 | 109.2 | 107.1 | 105.2 | 101.4 | 148.7 |
| 16000 | 89.6 | 95.1 | 97.7 | 98.8 | 101.7 | 102.7 | 100.9 | 103.5 | 105.5 | 107.7 | 104.6 | 102.8 | 99.6 | 148.5 |
| 20000 | 84.6 | 92.7 | 94.5 | 96.3 | 100.6 | 101.5 | 98.6 | 100.4 | 102.3 | 103.8 | 101.5 | 99.7 | 97.2 | 147.5 |
| 25000 | 83.7 | 88.5 | 91.8 | 92.9 | 97.2 | 98.6 | 95.9 | 95.7 | 99.5 | 99.6 | 97.4 | 95.6 | 94.7 | 146.4 |
| 31500 | 82.2 | 85.0 | 89.5 | 91.4 | 92.0 | 92.7 | 92.1 | 92.9 | 95.3 | 97.6 | 94.7 | 90.7 | 89.0 | 145.9 |
| 40000 | 76.5 | 80.0 | 84.2 | 85.4 | 90.2 | 90.7 | 86.7 | 87.5 | 90.5 | 92.9 | 89.1 | 85.5 | 84.9 | 145.5 |
| 50000 | 69.5 | 73.1 | 76.1 | 79.0 | 81.5 | 82.7 | 81.4 | 80.6 | 86.6 | 86.6 | 84.4 | 80.9 | 78.1 | 143.7 |
| 63000 | 63.7 | 66.1 | 69.8 | 72.4 | 73.2 | 74.4 | 76.2 | 74.5 | 82.7 | 80.4 | 78.6 | 75.1 | 73.0 | 143.3 |
| 80000 | 57.4 | 59.7 | 64.2 | 67.7 | 66.9 | 69.1 | 69.3 | 69.5 | 76.4 | 75.4 | 73.6 | 67.8 | 65.8 | 144.4 |
| GASPL | 108.2 | 110.9 | 111.5 | 111.7 | 112.8 | 114.6 | 115.0 | 118.0 | 124.0 | 127.8 | 129.4 | 128.5 | 125.1 | 165.3 |

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES TURBULANCE CORRECTION - YES

TEST DATE 02-21-78 TAPE NO. N294 ALPHA SB59 TAMB 23.00
 LOCATION C41 ANECH CH AERO. RDG. ADH088 PAMB 29.3630 RELHUM 45.00

MODEL TEST POINT 7607 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED 0. M/SEC (0. FPS)

08/30/79 19.452

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X76071

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 50 | 66.9 | 71.2 | 72.8 | 72.8 | 74.5 | 77.0 | 78.3 | 80.3 | 87.3 | 93.0 | 94.6 | 94.1 | 87.9 | 169.4 |
| 63 | 68.2 | 72.0 | 74.1 | 74.6 | 75.9 | 78.6 | 79.4 | 81.3 | 88.1 | 94.6 | 96.2 | 94.4 | 88.0 | 170.3 |
| 80 | 68.7 | 73.1 | 74.4 | 75.7 | 78.9 | 79.7 | 80.7 | 83.2 | 90.9 | 95.7 | 96.7 | 94.7 | 88.5 | 171.1 |
| 100 | 72.7 | 73.8 | 75.9 | 77.4 | 78.2 | 80.9 | 81.9 | 84.9 | 91.9 | 96.4 | 97.4 | 94.9 | 88.3 | 171.7 |
| 125 | 75.2 | 78.3 | 79.4 | 79.4 | 79.4 | 81.9 | 82.9 | 85.7 | 92.9 | 96.1 | 96.9 | 94.3 | 87.2 | 171.6 |
| 160 | 72.3 | 78.0 | 79.1 | 80.4 | 81.4 | 83.9 | 83.9 | 87.2 | 92.8 | 96.6 | 98.4 | 94.2 | 85.7 | 172.3 |
| 200 | 74.4 | 75.7 | 77.6 | 78.9 | 80.7 | 83.4 | 84.2 | 87.4 | 93.5 | 95.8 | 97.9 | 92.9 | 84.4 | 172.0 |
| 250 | 74.3 | 78.8 | 79.0 | 79.3 | 79.6 | 82.3 | 83.8 | 86.8 | 93.9 | 96.4 | 96.1 | 90.1 | 80.8 | 171.3 |
| 315 | 73.8 | 77.6 | 78.9 | 79.7 | 80.7 | 82.7 | 84.5 | 87.4 | 93.3 | 96.8 | 93.9 | 88.2 | 78.2 | 170.9 |
| 400 | 74.8 | 78.5 | 79.6 | 79.9 | 80.5 | 83.0 | 85.0 | 87.9 | 93.0 | 94.4 | 92.2 | 86.8 | 76.7 | 170.0 |
| 500 | 74.7 | 78.0 | 79.4 | 79.5 | 79.8 | 82.6 | 84.0 | 86.7 | 92.3 | 93.2 | 90.3 | 83.8 | 73.8 | 169.1 |
| 630 | 74.3 | 78.8 | 80.7 | 80.6 | 80.9 | 82.7 | 84.1 | 86.8 | 91.6 | 92.4 | 88.7 | 82.2 | 72.4 | 168.9 |
| 800 | 71.6 | 77.7 | 80.6 | 81.8 | 81.9 | 83.9 | 84.2 | 86.3 | 90.5 | 91.1 | 87.2 | 81.1 | 70.7 | 158.5 |
| 1000 | 69.8 | 76.5 | 79.2 | 81.0 | 82.7 | 83.5 | 83.3 | 85.6 | 89.6 | 89.4 | 85.1 | 78.7 | 68.2 | 167.8 |
| 1250 | 67.7 | 75.0 | 78.1 | 80.0 | 82.5 | 84.8 | 83.5 | 85.2 | 87.7 | 87.6 | 83.3 | 77.2 | 65.9 | 167.4 |
| 1600 | 64.6 | 72.8 | 78.0 | 78.7 | 80.7 | 83.0 | 82.0 | 83.5 | 85.0 | 85.0 | 80.1 | 73.8 | 62.1 | 166.3 |
| 2000 | 61.6 | 70.3 | 74.9 | 77.3 | 80.9 | 82.2 | 80.1 | 82.0 | 82.7 | 82.9 | 76.6 | 69.6 | 57.3 | 166.2 |
| 2500 | 54.8 | 66.6 | 70.8 | 74.2 | 79.3 | 80.4 | 77.3 | 78.3 | 78.6 | 77.8 | 71.7 | 63.9 | 50.0 | 165.2 |
| 3150 | 50.5 | 60.0 | 68.2 | 69.1 | 74.5 | 76.2 | 73.2 | 71.9 | 74.0 | 71.1 | 64.3 | 54.8 | 39.1 | 164.1 |
| 4000 | 42.8 | 51.8 | 60.1 | 64.4 | 66.3 | 67.5 | 66.5 | 65.9 | 65.9 | 64.4 | 56.3 | 40.9 | 18.9 | 163.6 |
| 5000 | 27.3 | 39.2 | 48.6 | 53.0 | 59.5 | 60.5 | 56.0 | 55.1 | 54.9 | 52.1 | 40.0 | 22.0 | 1 | 163.2 |
| 6300 | 2.6 | 18.1 | 28.4 | 35.8 | 40.7 | 42.7 | 40.6 | 37.4 | 38.9 | 31.6 | 17.5 | 161.4 | 161.0 | 162.0 |
| 8000 | | | | | | | | | | | | | | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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QASPL 84.6 88.8 90.6 91.6 93.0 95.0 95.5 98.1 103.6 106.5 106.7 103.3 96.1 162.7
PNL 89.3 94.5 97.6 99.5 102.2 103.9 103.0 104.9 108.9 110.9 109.3 104.3 95.4
PNLT 90.3 94.5 97.6 99.5 103.5 105.1 103.0 104.9 109.5 111.5 109.3 104.3 96.4

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-21-78 TAPE NO. N294 ALPHA SB59 TAMB 23.00
LOCATION C41 ANECH CH AERO. RDG. ADH088 PAMB 29.3630 RELHUM 45.00

MODEL TEST POINT ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.0 SQ IN) - FULL SIZE FREE-JET SPEED
7607 7807 0. M/SEC (0. FPS)

| IDENTIFICATION - MODEL | |
|-------------------------|--------|
| FJ-300-FM5DL | X76080 |
| BACKGROUND FJB400-FM5DL | X01400 |

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 92.3 | 64.5 | 64.6 | 66.2 | 66.6 | 66.2 | 66.6 | 66.2 | 66.2 | 66.2 | 66.2 | 66.2 | 66.2 | 143.9 |
| 315 | 63.5 | 64.5 | 65.5 | 65.9 | 67.2 | 69.6 | 69.6 | 69.6 | 69.6 | 69.6 | 69.6 | 69.6 | 69.6 | 144.9 |
| 400 | 65.1 | 65.8 | 66.4 | 66.4 | 68.0 | 69.9 | 69.9 | 69.9 | 69.9 | 69.9 | 69.9 | 69.9 | 69.9 | 146.5 |
| 500 | 65.4 | 66.2 | 67.4 | 68.3 | 69.1 | 71.5 | 71.5 | 71.5 | 71.5 | 71.5 | 71.5 | 71.5 | 71.5 | 147.4 |
| 630 | 66.3 | 67.1 | 68.8 | 69.1 | 70.3 | 72.6 | 72.6 | 72.6 | 72.6 | 72.6 | 72.6 | 72.6 | 72.6 | 147.9 |
| 800 | 66.6 | 67.3 | 69.9 | 70.4 | 71.0 | 73.9 | 73.9 | 73.9 | 73.9 | 73.9 | 73.9 | 73.9 | 73.9 | 148.1 |
| 1000 | 66.7 | 68.7 | 71.5 | 71.2 | 72.3 | 74.7 | 74.7 | 74.7 | 74.7 | 74.7 | 74.7 | 74.7 | 74.7 | 148.1 |
| 1250 | 69.3 | 71.0 | 72.8 | 72.9 | 73.9 | 76.1 | 76.1 | 76.1 | 76.1 | 76.1 | 76.1 | 76.1 | 76.1 | 148.4 |
| 1600 | 91.3 | 69.7 | 91.4 | 92.7 | 94.1 | 96.7 | 96.6 | 102.2 | 107.7 | 112.0 | 114.6 | 105.5 | 97.2 | 148.2 |
| 2000 | 91.3 | 90.6 | 92.0 | 92.5 | 93.4 | 96.0 | 96.1 | 102.6 | 108.5 | 112.9 | 112.8 | 105.0 | 97.1 | 147.9 |
| 2500 | 93.1 | 92.7 | 94.2 | 93.4 | 95.0 | 96.9 | 96.9 | 103.0 | 108.2 | 113.3 | 112.7 | 105.2 | 97.2 | 148.1 |
| 3150 | 95.7 | 95.0 | 94.7 | 95.2 | 95.6 | 98.2 | 100.1 | 104.0 | 109.0 | 112.3 | 112.3 | 105.0 | 97.5 | 147.9 |
| 4000 | 99.6 | 98.1 | 97.4 | 96.1 | 95.7 | 97.8 | 100.2 | 104.1 | 108.6 | 112.3 | 111.2 | 104.1 | 96.6 | 147.7 |
| 5000 | 101.5 | 100.6 | 100.4 | 99.4 | 97.2 | 99.0 | 100.9 | 104.6 | 108.4 | 112.3 | 110.4 | 104.1 | 96.6 | 148.0 |
| 6300 | 99.2 | 99.9 | 102.1 | 101.3 | 100.3 | 100.7 | 100.9 | 104.3 | 108.5 | 111.8 | 109.8 | 103.1 | 96.6 | 148.1 |
| 8000 | 98.1 | 98.3 | 99.7 | 101.5 | 102.3 | 102.5 | 101.8 | 104.4 | 108.4 | 110.8 | 109.3 | 102.6 | 95.6 | 148.1 |
| 10000 | 97.1 | 98.1 | 99.3 | 100.0 | 101.6 | 103.5 | 101.9 | 104.7 | 107.3 | 110.3 | 107.5 | 101.8 | 95.1 | 148.0 |
| 12500 | 95.2 | 96.3 | 98.3 | 99.3 | 100.5 | 102.1 | 101.6 | 103.5 | 105.4 | 108.2 | 105.2 | 100.3 | 94.0 | 147.2 |
| 16000 | 93.9 | 95.7 | 97.8 | 98.5 | 101.1 | 102.3 | 100.0 | 103.0 | 104.4 | 106.8 | 103.3 | 99.1 | 93.3 | 147.6 |
| 20000 | 88.9 | 93.4 | 94.4 | 96.6 | 100.5 | 101.4 | 98.0 | 100.2 | 101.9 | 103.8 | 99.8 | 96.6 | 92.0 | 147.1 |
| 25000 | 87.7 | 89.2 | 92.3 | 92.9 | 97.2 | 98.3 | 95.9 | 95.7 | 99.9 | 99.2 | 96.1 | 93.5 | 90.0 | 146.1 |
| 31500 | 86.0 | 85.2 | 89.5 | 91.9 | 91.8 | 92.6 | 92.0 | 92.9 | 97.0 | 97.4 | 94.1 | 88.3 | 85.5 | 146.0 |
| 40000 | 81.1 | 81.1 | 84.6 | 86.3 | 90.0 | 90.9 | 86.8 | 87.6 | 91.4 | 91.6 | 86.9 | 82.9 | 81.0 | 145.4 |
| 50000 | 74.1 | 73.6 | 77.1 | 79.6 | 81.9 | 82.8 | 82.1 | 80.9 | 86.9 | 85.0 | 82.3 | 78.0 | 74.5 | 143.4 |
| 63000 | 68.1 | 68.0 | 70.6 | 73.3 | 73.5 | 74.6 | 75.9 | 74.2 | 82.0 | 77.9 | 76.9 | 72.0 | 68.8 | 142.4 |
| 80000 | 62.1 | 61.2 | 64.4 | 67.9 | 66.7 | 68.8 | 67.7 | 69.0 | 75.9 | 72.6 | 70.2 | 63.3 | 60.7 | 143.1 |
| ASPL | 108.0 | 108.1 | 109.3 | 109.6 | 111.0 | 112.0 | 111.9 | 115.1 | 119.4 | 123.9 | 124.9 | 121.1 | 115.6 | 161.2 |

| TEST DATE | TAPE NO. | ALPHA | TAMB |
|-----------------------|------------|---------|--------|
| 02-27-78 | N299 | SB59 | 39.00 |
| LOCATION C41 ANECH CH | AERO. RDG. | PAMB | RELHUM |
| | | 29.3300 | 54.00 |

| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
|-------|------------|-----------------------|------------------------------------|---------------------------|
| 7600 | 7608 | 12.2 M (40.0 FT) ARC | 154.7 SQ CM (23.99 SQ IN) - MODEL | 117.65 M/SEC (386.0 FPS) |

ORIGINAL PAGE IS
OF POOR QUALITY

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X76080

ANGLES MEASURED FROM INLET, DEGREES

40. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PML

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

ORIGINAL PAGE IS
OF POOR QUALITY

MODEL/FULL SIZE SCALE FACTOR
INPUT 1.000 CALC. 1.000

FREE JET VELOCITY (FT/SEC) 386.00
FREE JET DIAMETER (IN) 48.00

REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 3859 TAPB 39.00
LOCATION C41 ANECH CH AERO. RDG. ADH10 PAFB 29.3300 RELHJM 54.00

MODEL TEST POINT 7608 ACQUSTIC RANGE 12.2 M (40.0 FT) ARC 184.7 SQ CM (23.99 SQ IN) - MODEL 117.65 M/SEC (386.0 FPS) FREE-JET SPEED

07/17/79 10.180

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X76081

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PML |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 69.0 | 70.4 | 71.1 | 70.6 | 71.6 | 72.2 | 72.2 | 73.3 | 78.7 | 87.6 | 89.5 | 87.5 | 79.4 | 163.3 |
| 63 | 68.5 | 71.0 | 71.8 | 70.9 | 74.9 | 73.6 | 73.6 | 74.5 | 81.1 | 88.5 | 90.3 | 87.6 | 78.4 | 163.9 |
| 80 | 70.9 | 72.1 | 73.0 | 73.1 | 84.6 | 75.2 | 74.6 | 76.4 | 83.2 | 89.6 | 91.3 | 87.3 | 78.8 | 164.9 |
| 100 | 74.4 | 75.0 | 75.0 | 75.0 | 74.8 | 76.3 | 76.4 | 78.2 | 85.5 | 90.5 | 91.4 | 85.6 | 79.6 | 165.0 |
| 125 | 73.9 | 73.1 | 75.4 | 75.2 | 76.2 | 77.2 | 77.1 | 79.3 | 85.7 | 90.1 | 92.2 | 84.8 | 79.2 | 165.3 |
| 160 | 74.7 | 74.2 | 76.8 | 76.0 | 77.8 | 78.6 | 78.4 | 79.6 | 87.1 | 90.0 | 91.6 | 83.1 | 78.5 | 165.2 |
| 200 | 74.1 | 76.5 | 78.1 | 77.5 | 77.9 | 79.3 | 79.6 | 81.5 | 88.0 | 90.8 | 89.6 | 82.6 | 78.0 | 165.2 |
| 250 | 75.9 | 74.8 | 76.6 | 77.3 | 77.2 | 78.6 | 79.2 | 81.9 | 87.8 | 91.4 | 89.6 | 82.7 | 77.9 | 165.6 |
| 315 | 75.4 | 75.6 | 76.9 | 77.0 | 78.8 | 79.6 | 80.7 | 82.3 | 88.8 | 90.7 | 89.4 | 82.8 | 78.3 | 166.1 |
| 400 | 76.1 | 76.7 | 78.5 | 77.5 | 79.2 | 81.0 | 81.3 | 83.5 | 88.7 | 90.7 | 89.2 | 81.4 | 76.4 | 166.2 |
| 500 | 77.2 | 78.0 | 78.4 | 78.9 | 79.1 | 80.8 | 81.7 | 83.9 | 88.3 | 90.5 | 87.0 | 80.8 | 75.4 | 166.3 |
| 630 | 80.8 | 80.6 | 80.5 | 79.3 | 80.8 | 82.4 | 82.6 | 84.4 | 88.2 | 89.7 | 86.0 | 79.2 | 74.4 | 166.7 |
| 800 | 82.1 | 82.7 | 83.3 | 82.5 | 84.1 | 83.8 | 82.3 | 83.9 | 88.0 | 88.5 | 85.1 | 78.1 | 72.4 | 167.2 |
| 1000 | 79.3 | 82.0 | 85.3 | 84.8 | 86.1 | 85.4 | 83.1 | 83.7 | 86.9 | 87.9 | 83.3 | 77.0 | 71.2 | 167.7 |
| 1250 | 78.8 | 80.8 | 83.0 | 85.0 | 85.5 | 86.3 | 83.2 | 84.0 | 85.5 | 86.3 | 81.3 | 75.8 | 69.9 | 167.6 |
| 1600 | 76.6 | 79.7 | 81.9 | 82.9 | 83.3 | 84.7 | 83.0 | 82.8 | 84.9 | 85.2 | 79.6 | 74.4 | 68.0 | 167.7 |
| 2000 | 73.3 | 76.9 | 80.0 | 81.3 | 84.8 | 84.7 | 81.4 | 82.4 | 83.3 | 83.0 | 76.6 | 71.5 | 64.7 | 168.1 |
| 2500 | 72.4 | 76.8 | 79.9 | 80.6 | 83.7 | 83.3 | 79.1 | 79.6 | 81.5 | 78.2 | 71.6 | 65.8 | 57.5 | 168.6 |
| 3150 | 63.5 | 71.4 | 74.0 | 76.6 | 79.0 | 78.9 | 75.6 | 73.9 | 76.5 | 73.7 | 66.4 | 56.2 | 45.9 | 167.9 |
| 4000 | 55.3 | 61.8 | 67.3 | 68.8 | 70.1 | 70.3 | 68.6 | 67.1 | 68.8 | 65.2 | 56.9 | 43.7 | 28.4 | 166.9 |
| 5000 | 40.2 | 47.2 | 55.8 | 60.4 | 63.8 | 63.8 | 58.5 | 57.0 | 58.1 | 50.9 | 40.5 | 25.2 | 0.3 | 166.6 |
| 6300 | 19.9 | 30.6 | 40.1 | 44.8 | 45.6 | 43.7 | 39.2 | 42.1 | 30.4 | 17.2 | | | | 165.6 |
| 8000 | | | | | | | | | | | | | | 163.9 |
| 10000 | | | | | | | | | | | | | | 162.0 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| CASPL | 89.2 | 90.5 | 92.3 | 92.6 | 94.5 | 94.5 | 93.1 | 94.4 | 99.0 | 101.7 | 101.1 | 95.6 | 89.2 | 180.1 |
| PNL | 96.4 | 99.3 | 101.8 | 102.5 | 104.9 | 104.9 | 102.4 | 103.3 | 106.4 | 107.3 | 104.6 | 98.2 | 92.3 | |
| PNLT | 96.4 | 99.3 | 102.6 | 103.1 | 106.2 | 106.1 | 102.9 | 103.3 | 107.0 | 107.8 | 104.6 | 98.2 | 93.4 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 3859 TAMB 39.00
LOCATION C41 ANECH CH AERG. RDG. ADH110 PAMB 29.3300 RELHUM 54.00

MODEL TEST POINT 7608 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 117.65 M/SEC (386.0 FPS) FREE-JET SPEED

ORIGINAL PAGE IS
OF POOR QUALITY

07/19/79 18.692

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X76090
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 87.0 | 92.3 | 90.3 | 91.4 | 92.0 | 94.6 | 97.0 | 98.4 | 103.8 | 108.4 | 112.8 | 115.2 | 115.6 | 149.4 |
| 315 | 88.6 | 91.4 | 91.2 | 91.7 | 94.1 | 95.7 | 96.8 | 99.0 | 105.9 | 110.8 | 114.4 | 117.6 | 116.2 | 150.7 |
| 400 | 89.9 | 92.9 | 92.7 | 92.5 | 94.1 | 96.2 | 97.6 | 99.5 | 107.0 | 114.3 | 117.2 | 118.9 | 116.0 | 152.5 |
| 500 | 91.2 | 93.5 | 94.3 | 94.3 | 95.7 | 97.8 | 98.4 | 100.6 | 108.1 | 116.1 | 119.3 | 119.9 | 116.3 | 154.0 |
| 630 | 92.4 | 94.9 | 95.2 | 95.0 | 100.3 | 98.7 | 100.0 | 102.5 | 110.2 | 116.5 | 119.9 | 119.5 | 116.7 | 154.3 |
| 800 | 97.1 | 95.9 | 97.0 | 97.0 | 98.1 | 99.9 | 100.8 | 104.2 | 111.7 | 117.5 | 120.7 | 120.6 | 117.0 | 155.2 |
| 1000 | 101.2 | 103.1 | 103.6 | 101.4 | 100.4 | 101.1 | 102.2 | 105.1 | 113.3 | 117.4 | 120.5 | 120.2 | 116.3 | 155.3 |
| 1250 | 97.9 | 101.7 | 101.7 | 102.2 | 103.6 | 104.4 | 104.3 | 106.2 | 113.1 | 116.3 | 121.9 | 119.8 | 115.2 | 155.5 |
| 1600 | 103.5 | 101.9 | 100.1 | 100.4 | 100.7 | 103.3 | 104.0 | 106.9 | 114.3 | 117.0 | 121.7 | 118.4 | 113.4 | 155.3 |
| 2000 | 105.2 | 105.7 | 104.2 | 102.0 | 100.8 | 102.2 | 104.1 | 106.7 | 114.9 | 118.1 | 120.8 | 115.5 | 111.0 | 154.9 |
| 2500 | 105.8 | 105.1 | 105.1 | 104.6 | 103.7 | 103.1 | 105.0 | 107.4 | 114.3 | 118.8 | 119.2 | 114.6 | 109.6 | 154.5 |
| 3150 | 103.1 | 105.1 | 104.4 | 104.4 | 105.0 | 105.1 | 105.0 | 108.2 | 114.6 | 118.0 | 117.5 | 113.9 | 108.9 | 153.9 |
| 4000 | 101.4 | 102.2 | 103.2 | 103.2 | 103.5 | 105.1 | 105.3 | 107.5 | 113.6 | 116.9 | 116.5 | 111.7 | 107.7 | 152.8 |
| 5000 | 100.2 | 102.3 | 101.8 | 102.3 | 103.1 | 104.5 | 106.1 | 108.3 | 112.7 | 116.7 | 114.8 | 110.5 | 105.7 | 152.3 |
| 6300 | 98.4 | 101.0 | 101.8 | 101.7 | 102.8 | 104.9 | 105.6 | 107.7 | 112.2 | 115.4 | 113.2 | 109.5 | 106.2 | 151.6 |
| 8000 | 97.2 | 100.3 | 100.5 | 101.3 | 102.7 | 103.6 | 104.8 | 106.9 | 111.4 | 113.5 | 111.8 | 107.7 | 104.8 | 150.6 |
| 10000 | 95.1 | 98.9 | 99.8 | 100.7 | 102.3 | 105.0 | 104.1 | 106.7 | 110.0 | 112.0 | 110.2 | 106.7 | 102.6 | 150.1 |
| 12500 | 92.9 | 97.5 | 98.6 | 99.7 | 101.3 | 102.7 | 103.1 | 104.7 | 107.4 | 110.1 | 107.4 | 104.7 | 100.9 | 148.9 |
| 16000 | 90.1 | 96.1 | 97.9 | 99.0 | 101.2 | 102.2 | 100.9 | 103.0 | 105.4 | 108.4 | 105.5 | 103.6 | 99.8 | 148.7 |
| 20000 | 85.4 | 93.1 | 94.2 | 96.6 | 100.6 | 100.7 | 98.6 | 99.9 | 102.2 | 104.5 | 102.2 | 100.0 | 97.0 | 147.5 |
| 25000 | 83.9 | 88.9 | 92.0 | 92.1 | 97.2 | 97.9 | 95.4 | 94.6 | 99.5 | 100.0 | 98.1 | 96.1 | 95.2 | 146.3 |
| 31500 | 82.7 | 85.7 | 89.4 | 91.4 | 91.9 | 92.7 | 91.6 | 92.4 | 95.5 | 98.0 | 94.9 | 91.4 | 89.3 | 146.0 |
| 40000 | 77.7 | 80.9 | 84.1 | 85.9 | 90.4 | 90.6 | 86.7 | 87.2 | 90.6 | 92.8 | 90.5 | 85.2 | 85.1 | 145.7 |
| 50000 | 70.3 | 74.3 | 77.0 | 79.0 | 81.9 | 82.7 | 81.9 | 80.3 | 86.6 | 87.5 | 84.4 | 80.9 | 78.3 | 144.0 |
| 63000 | 65.5 | 67.8 | 70.7 | 72.9 | 74.0 | 74.7 | 76.4 | 74.5 | 82.6 | 81.0 | 78.1 | 73.4 | 72.5 | 143.5 |
| 80000 | 59.5 | 61.2 | 64.9 | 68.4 | 67.6 | 69.3 | 69.1 | 69.3 | 75.8 | 76.1 | 73.1 | 68.1 | 65.6 | 144.4 |
| OASPL | 112.7 | 113.9 | 113.8 | 113.7 | 114.5 | 115.6 | 116.2 | 118.5 | 124.6 | 128.6 | 130.8 | 129.5 | 126.1 | 166.3 |

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TEST DATE 02-20-78
LOCATION C41 ANECH CH
TAPE NO. N294
AERO. RDG. ADH081
ALPHA SB59
PAMB 29.2960
TAMB 27.86
RELHUM 27.00

MODEL TEST POINT 7609
ACOUSTIC RANGE 12.2 M (40.0 FT) ARC
FREE-JET SPEED 0. M/SEC (0. FPS)

07/19/79 18.682

698

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X76090

ANGLES MEASURED FROM INLET DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PVL

50

63

80

100

125

160

200 87.0 92.3 90.3 31.4 92.0 94.6 97.0 98.4 103.6 108.4 112.6 116.2 115.6 149.4
250 88.6 91.4 91.2 91.7 94.1 95.7 96.8 99.0 105.9 110.8 114.4 117.6 116.2 150.7
315 89.9 92.9 92.7 92.5 94.1 96.2 97.6 99.5 107.0 114.3 117.2 118.9 116.0 152.5
400 91.2 93.5 94.3 95.7 97.8 98.4 100.6 108.1 116.1 119.3 119.9 116.3 154.0
500 92.4 94.9 95.2 95.0 100.3 98.7 100.0 102.5 110.2 116.5 119.9 119.5 116.7 154.3
630 97.1 95.9 97.0 98.1 99.9 100.8 104.2 111.7 117.5 120.7 120.6 117.0 155.2
800 101.2 103.1 103.6 101.4 100.4 101.1 102.2 105.7 113.3 117.4 120.5 120.2 116.3 155.3
1000 97.9 101.7 101.7 102.2 103.6 104.4 104.3 106.4 113.1 116.3 121.9 119.8 115.2 155.5
1250 103.5 101.9 100.1 100.4 100.7 103.3 104.0 106.9 114.3 117.0 121.7 118.4 113.4 155.3
1600 105.2 105.7 104.2 102.0 100.8 102.2 104.1 106.7 114.9 118.1 120.8 115.5 111.0 154.9
2000 105.8 105.1 104.6 103.7 103.1 105.0 107.4 114.3 118.8 119.2 114.6 109.6 154.5
2500 103.1 105.1 104.4 104.4 105.0 105.1 105.0 108.2 114.6 118.0 117.5 113.9 108.9 153.9
3150 101.4 102.2 103.2 103.5 105.1 105.3 107.5 113.6 116.9 116.5 111.7 107.7 152.8
4000 100.2 102.3 101.8 102.3 103.1 104.5 106.1 108.3 112.7 116.7 114.8 110.5 105.7 152.3
5000 98.4 101.0 101.8 101.7 102.8 104.9 105.6 107.7 112.2 115.4 113.2 109.5 106.2 151.6
6300 97.2 100.3 100.5 101.3 102.7 103.6 104.8 106.9 111.4 113.5 111.8 107.7 104.8 150.6
8000 95.1 98.9 99.8 100.7 102.3 105.0 104.1 106.7 110.0 112.0 110.2 106.7 102.6 150.1
10000 92.9 97.5 98.6 99.7 101.3 102.7 103.1 104.7 107.4 110.1 107.4 104.7 100.9 148.9
12500 90.1 96.1 97.9 99.0 101.2 102.2 100.9 103.0 105.4 108.4 105.5 103.6 99.8 148.7
16000 85.4 93.1 94.2 96.6 100.6 100.7 98.6 99.9 102.2 104.5 102.2 100.0 97.0 147.5
20000 83.9 88.9 92.0 92.1 97.2 97.9 95.4 94.6 99.5 100.0 98.1 96.1 95.2 146.3
25000 82.7 85.7 89.4 91.4 91.9 92.7 91.6 92.4 95.5 98.0 94.9 91.4 89.3 146.0
31500 77.7 80.9 84.1 85.9 90.4 90.6 86.7 87.2 90.6 92.8 90.5 85.2 83.1 145.7
40000 70.3 74.3 77.0 79.0 81.9 82.7 81.9 80.3 86.6 87.5 84.4 80.9 78.3 144.0
50000 65.5 67.8 70.7 72.9 74.0 74.7 76.4 74.5 82.6 81.0 78.1 75.4 72.5 143.5
63000 59.5 61.3 64.9 68.4 67.6 69.3 69.1 68.3 75.8 76.1 73.1 68.1 65.6 144.4
80000 59.5 61.3 64.9 68.4 67.6 69.3 69.1 68.3 75.8 76.1 73.1 68.1 65.6 144.4

CASPL 112.7 113.2 113.8 113.7 114.5 115.6 116.2 118.5 124.6 128.6 130.8 129.5 126.1 166.3

MODEL/FILE SIZE SCALE FACTOR FREE JET VELOCITY (EI/SEC) 0. REFRACTION CORRECTION - YES
INPUT 1.000 CALC. 1.000 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAMB 27.86
LOCATION C41 ANECH CH AERO. RDG. ADH081 FAMB 29.2960 RELHUM 27.00

MODEL TEST POINT 7602 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

ORIGINAL PAGE IS
OF POOR QUALITY

07/19/79 18.682

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG F, 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FH0DL X76091

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 68.1 | 72.7 | 73.5 | 74.0 | 76.0 | 76.3 | 79.5 | 81.0 | 87.8 | 94.0 | 95.4 | 94.9 | 88.7 | 170.2 |
| 63 | 69.4 | 73.3 | 75.1 | 75.9 | 77.6 | 79.9 | 80.4 | 82.1 | 88.9 | 95.9 | 97.4 | 95.9 | 89.0 | 171.6 |
| 80 | 70.5 | 74.6 | 75.9 | 76.4 | 82.2 | 80.7 | 81.9 | 83.9 | 90.9 | 96.2 | 98.0 | 95.5 | 89.2 | 172.0 |
| 100 | 75.2 | 75.6 | 77.7 | 78.4 | 79.9 | 81.9 | 82.7 | 85.7 | 92.4 | 97.2 | 98.7 | 96.4 | 89.4 | 172.9 |
| 125 | 79.2 | 82.6 | 84.2 | 82.7 | 82.2 | 83.0 | 84.0 | 86.5 | 94.0 | 96.9 | 98.5 | 95.8 | 88.5 | 172.9 |
| 160 | 75.6 | 81.1 | 82.2 | 83.5 | 85.2 | 86.2 | 86.0 | 87.5 | 93.6 | 95.7 | 99.7 | 95.2 | 87.0 | 173.2 |
| 200 | 81.0 | 81.0 | 80.4 | 81.5 | 82.2 | 85.0 | 85.5 | 88.0 | 94.6 | 96.1 | 99.2 | 93.5 | 84.7 | 172.9 |
| 250 | 82.4 | 84.6 | 84.3 | 82.8 | 82.1 | 83.6 | 85.4 | 87.6 | 95.0 | 97.0 | 97.9 | 90.1 | 81.6 | 172.6 |
| 315 | 82.6 | 83.7 | 84.9 | 85.2 | 84.8 | 84.3 | 86.0 | 88.0 | 94.1 | 97.3 | 95.9 | 88.7 | 79.4 | 172.2 |
| 400 | 75.3 | 83.3 | 83.8 | 84.7 | 85.7 | 86.0 | 85.7 | 88.4 | 94.0 | 96.2 | 93.7 | 87.3 | 77.7 | 171.5 |
| 500 | 77.2 | 79.9 | 82.3 | 83.2 | 84.0 | 85.8 | 85.7 | 87.4 | 92.7 | 94.6 | 92.3 | 84.5 | 75.5 | 170.5 |
| 630 | 75.5 | 79.6 | 80.6 | 81.9 | 83.3 | 84.8 | 86.3 | 87.9 | 91.5 | 94.1 | 90.1 | 82.6 | 72.5 | 170.0 |
| 800 | 73.2 | 78.0 | 80.2 | 81.2 | 82.7 | 85.0 | 85.5 | 87.2 | 90.6 | 92.4 | 88.0 | 80.9 | 71.8 | 169.2 |
| 1000 | 71.6 | 77.0 | 78.7 | 80.6 | 82.4 | 83.5 | 84.6 | 86.2 | 89.6 | 90.2 | 86.2 | 78.5 | 69.3 | 168.3 |
| 1250 | 68.9 | 75.3 | 77.8 | 79.8 | 82.0 | 84.8 | 83.8 | 85.7 | 88.0 | 88.3 | 84.0 | 76.7 | 65.7 | 167.7 |
| 1600 | 65.9 | 73.2 | 76.2 | 78.5 | 80.7 | 82.3 | 82.5 | 83.5 | 84.9 | 85.9 | 80.3 | 73.3 | 61.6 | 166.5 |
| 2000 | 62.1 | 71.2 | 75.1 | 77.5 | 80.4 | 81.7 | 80.1 | 81.5 | 82.6 | 83.5 | 77.5 | 70.5 | 57.5 | 166.4 |
| 2500 | 55.6 | 67.1 | 70.5 | 74.4 | 79.6 | 79.6 | 77.2 | 77.7 | 78.5 | 78.4 | 72.4 | 64.1 | 49.8 | 165.2 |
| 3150 | 50.8 | 60.4 | 66.4 | 68.3 | 74.5 | 75.5 | 72.7 | 70.9 | 73.9 | 71.5 | 65.0 | 55.3 | 39.6 | 163.9 |
| 4000 | 43.3 | 52.5 | 60.1 | 64.4 | 66.2 | 67.4 | 65.9 | 65.4 | 66.1 | 64.8 | 55.5 | 41.7 | 19.2 | 163.6 |
| 5000 | 28.5 | 40.1 | 48.5 | 53.5 | 59.7 | 60.5 | 56.0 | 54.8 | 55.0 | 52.0 | 41.4 | 21.7 | | 163.3 |
| 6300 | 3.3 | 19.3 | 29.3 | 35.8 | 41.2 | 42.7 | 41.1 | 37.1 | 38.9 | 32.5 | 17.4 | | | 161.6 |
| 8000 | | | | | | | | | | | | | | 161.2 |
| 10000 | | | | | | | | | | | | | | 162.1 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

ORIGINAL PAGE IS
OF POOR QUALITY

| | | | | | | | | | | | | | | |
|-------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| 0ASPL | 89.4 | 92.2 | 93.3 | 93.8 | 95.0 | 96.3 | 96.7 | 98.7 | 104.3 | 107.2 | 108.1 | 104.4 | 97.1 | 163.7 |
| PWL | 93.8 | 97.5 | 99.1 | 100.5 | 103.1 | 104.1 | 103.7 | 105.0 | 109.5 | 111.6 | 110.6 | 104.9 | 96.3 | |
| PWL | 95.0 | 98.2 | 99.9 | 100.5 | 104.5 | 105.3 | 103.7 | 105.0 | 110.0 | 112.3 | 111.7 | 104.9 | 97.5 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAMB 27.86
LOCATION C41 ANECH CH AERO. RDG. ADH081 PAMB 29.2960 RELNUM 27.00

MODEL TEST POINT 7609 ACOUSTIC RANK 731.5 M (2400.0 FT) SL 9032.2 SQ CH (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS) FREE-JET SPEED

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X76100
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250 63.6 67.6 67.1 66.3 66.7 90.6 93.7 95.9 98.3 104.9 110.0 114.2 114.1 147.0
315 85.9 86.6 87.6 86.5 90.0 91.9 93.0 95.5 99.9 106.7 111.4 115.3 114.2 148.0
400 87.6 87.9 88.9 67.4 90.1 92.7 93.6 95.7 101.0 110.8 115.2 117.1 113.5 150.1
500 88.0 88.0 90.5 69.4 91.9 93.5 94.9 97.6 102.5 112.6 116.5 117.4 111.9 150.9
630 88.6 89.4 91.1 71.1 97.8 95.1 98.5 99.2 104.9 112.7 117.6 117.0 110.2 151.3
800 92.3 90.1 92.1 72.6 94.3 95.9 97.5 100.9 106.7 113.7 118.4 116.5 108.2 151.7
1000 94.2 93.0 95.0 74.4 96.4 97.7 99.1 102.3 108.2 113.8 117.9 116.5 105.8 151.4
1250 95.5 95.3 96.3 76.0 97.2 99.6 100.0 103.4 108.6 113.4 119.3 115.5 104.4 152.1
1600 104.6 100.2 98.7 76.7 97.6 99.9 101.3 104.6 109.0 114.0 119.5 114.0 103.7 152.3
2000 104.0 104.5 105.0 82.3 98.2 99.5 100.6 104.8 109.8 115.9 119.3 112.8 103.3 152.7
2500 103.2 103.9 104.9 84.9 104.6 101.7 102.0 105.2 109.9 116.0 119.0 111.7 102.7 152.6
3150 101.2 102.0 103.0 83.5 104.8 106.2 103.6 106.3 110.5 115.6 117.8 110.0 101.5 152.1
4000 100.6 101.9 81.9 102.2 104.1 104.7 106.4 109.7 114.6 115.9 108.1 99.6 150.9
5000 100.3 100.1 101.2 80.9 101.9 103.1 105.2 107.4 110.2 115.1 114.2 105.8 98.6 150.7
6300 99.5 99.9 100.9 80.8 101.3 104.2 104.4 107.6 109.7 113.8 112.8 105.1 97.5 150.0
8000 98.9 99.6 100.2 80.8 101.6 103.2 103.5 107.6 110.2 112.3 111.5 103.6 96.6 149.6
10000 97.8 98.6 100.0 80.5 101.1 103.5 103.1 107.2 109.5 111.8 110.0 103.2 96.3 149.5
12500 96.2 97.6 98.5 79.7 101.0 101.6 101.5 105.0 107.1 109.7 107.9 101.0 94.6 148.3
16000 94.6 97.1 98.4 78.9 100.5 102.0 100.7 103.6 105.5 109.2 105.7 99.6 93.5 148.7
20000 90.1 94.8 95.8 76.7 99.9 100.5 97.9 100.8 103.2 105.1 102.7 97.5 91.7 147.6
25000 89.1 90.8 93.6 73.0 97.5 98.4 95.5 95.8 100.5 100.7 98.4 93.4 89.9 146.6
31500 87.3 87.6 91.0 72.2 92.9 93.2 91.6 93.5 97.3 98.7 96.1 88.8 84.6 146.6
40000 82.4 83.2 85.9 67.1 90.8 92.0 87.1 88.2 91.9 93.4 91.2 83.5 80.8 146.3
50000 75.4 76.1 78.3 60.8 83.2 83.9 82.6 81.7 87.4 87.5 85.3 78.5 73.8 144.5
63000 69.9 70.5 72.4 54.3 74.5 75.4 76.7 75.2 82.3 80.4 79.1 72.3 68.6 143.3
80000 64.2 63.7 66.4 49.4 68.0 70.1 69.2 69.5 76.1 75.5 74.0 63.9 60.5 144.3

GASPL 111.9 111.8 112.7 92.5 113.2 114.3 114.4 117.4 121.0 126.1 129.1 126.3 121.0 164.1

TEST DATE 02-27-78
LOCATION C41 ANECH CH

TAPE NO. N299
AERO. RDG. ADH115

ALPHA SB59
PAMB 29.3300

TAMB 38.00
RELHUM 54.00

MODEL TEST POINT
7610

ACOUSTIC RANGE
12.2 M (40.0 FT) ARC

SIZE
23.99 SQ CH (23.99 SQ IN) - MODEL

FREE-JET SPEED
90.83 M/SEC (298.0 FPS)

ORIGINAL PAGE IS
OF POOR QUALITY

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X76100

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 88.6 | 91.8 | 90.2 | 89.5 | 89.8 | 90.6 | 92.3 | 93.1 | 97.2 | 103.3 | 107.5 | 111.8 | 112.0 | 144.9 |
| 315 | 88.6 | 91.8 | 90.2 | 89.5 | 89.8 | 90.6 | 92.0 | 93.3 | 99.0 | 108.1 | 112.1 | 114.6 | 112.8 | 147.8 |
| 400 | 93.4 | 92.9 | 92.5 | 90.7 | 91.8 | 92.8 | 92.9 | 94.1 | 101.2 | 110.8 | 114.6 | 116.5 | 113.4 | 149.8 |
| 500 | 95.2 | 94.2 | 93.7 | 92.8 | 93.7 | 93.7 | 94.3 | 96.2 | 103.6 | 111.4 | 116.4 | 117.3 | 113.8 | 150.9 |
| 630 | 95.5 | 94.3 | 93.4 | 92.5 | 93.6 | 93.6 | 94.3 | 96.9 | 105.7 | 112.6 | 117.5 | 117.8 | 113.9 | 151.7 |
| 800 | 96.4 | 95.7 | 96.0 | 96.0 | 96.1 | 96.2 | 96.9 | 99.5 | 107.4 | 112.9 | 117.5 | 117.7 | 113.3 | 151.8 |
| 1000 | 99.9 | 96.5 | 97.1 | 97.9 | 97.3 | 98.1 | 98.5 | 100.8 | 107.7 | 112.3 | 118.7 | 117.4 | 111.9 | 152.1 |
| 1250 | 101.7 | 99.3 | 99.9 | 99.2 | 99.2 | 99.2 | 99.4 | 101.8 | 108.0 | 112.9 | 118.8 | 115.8 | 111.2 | 152.0 |
| 1600 | 103.1 | 101.7 | 101.3 | 80.3 | 99.7 | 100.5 | 100.8 | 103.0 | 108.9 | 114.7 | 118.6 | 114.5 | 110.6 | 152.1 |
| 2000 | 112.2 | 106.6 | 103.7 | 84.7 | 99.6 | 100.2 | 100.3 | 103.4 | 109.2 | 115.0 | 118.3 | 113.5 | 110.0 | 152.5 |
| 2500 | 109.3 | 108.9 | 108.5 | 87.9 | 106.3 | 102.6 | 101.6 | 104.0 | 110.0 | 114.8 | 117.3 | 111.9 | 108.8 | 152.3 |
| 3150 | 109.5 | 109.3 | 109.1 | 87.4 | 107.4 | 107.3 | 103.6 | 105.3 | 109.5 | 114.4 | 115.8 | 110.3 | 107.0 | 151.9 |
| 4000 | 108.7 | 108.4 | 108.2 | 86.0 | 105.0 | 105.5 | 105.0 | 105.7 | 110.5 | 115.1 | 114.5 | 108.5 | 106.5 | 151.6 |
| 5000 | 108.2 | 107.1 | 107.1 | 85.2 | 105.0 | 104.8 | 105.9 | 107.1 | 110.7 | 114.5 | 113.9 | 108.5 | 106.0 | 151.4 |
| 6300 | 107.6 | 106.5 | 106.5 | 85.4 | 104.8 | 106.4 | 105.8 | 107.8 | 111.7 | 113.5 | 112.8 | 107.2 | 105.3 | 151.3 |
| 8000 | 106.7 | 106.2 | 106.2 | 85.7 | 105.5 | 106.1 | 105.3 | 108.4 | 111.3 | 113.1 | 111.5 | 107.0 | 105.2 | 151.3 |
| 10000 | 105.9 | 105.9 | 105.6 | 85.6 | 105.1 | 106.5 | 105.1 | 108.0 | 109.1 | 111.3 | 109.7 | 105.0 | 103.6 | 150.6 |
| 12500 | 104.6 | 104.9 | 105.2 | 84.8 | 105.0 | 104.6 | 103.5 | 105.8 | 108.1 | 111.3 | 108.1 | 104.1 | 102.9 | 150.5 |
| 16000 | 102.4 | 103.1 | 103.1 | 83.9 | 104.5 | 105.0 | 102.7 | 104.5 | 106.3 | 107.7 | 105.5 | 102.5 | 101.8 | 150.0 |
| 20000 | 100.4 | 102.2 | 102.7 | 81.8 | 104.0 | 103.5 | 100.0 | 101.7 | 104.8 | 104.8 | 102.9 | 100.5 | 102.8 | 150.1 |
| 25000 | 95.3 | 99.3 | 99.4 | 78.1 | 101.6 | 101.4 | 97.9 | 97.3 | 101.8 | 102.7 | 100.3 | 95.2 | 96.1 | 149.5 |
| 31500 | 93.5 | 94.6 | 96.5 | 77.3 | 96.9 | 96.2 | 93.6 | 94.4 | 97.4 | 98.5 | 96.6 | 91.2 | 94.1 | 148.6 |
| 40000 | 90.9 | 90.4 | 93.1 | 72.2 | 94.8 | 95.0 | 89.3 | 89.4 | 93.1 | 92.8 | 90.8 | 86.2 | 86.7 | 148.9 |
| 50000 | 85.6 | 85.7 | 87.5 | 67.2 | 86.9 | 84.7 | 82.7 | 82.7 | 88.9 | 86.6 | 85.6 | 80.9 | 82.3 | 147.2 |
| 63000 | 77.6 | 77.7 | 79.0 | 59.3 | 78.5 | 78.4 | 78.8 | 76.2 | 84.3 | 83.2 | 81.9 | 73.9 | 75.7 | 146.3 |
| 80000 | 70.6 | 70.5 | 71.6 | 54.5 | 72.0 | 73.1 | 71.2 | 70.6 | 74.4 | 73.4 | 72.1 | 64.1 | 65.9 | 145.0 |

GASPL 118.7 117.6 117.4 96.5 116.2 116.3 115.1 117.2 121.4 125.7 128.5 126.7 123.3 164.7

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000
FREE JET VELOCITY (FT/SEC) 298.00
FREE JET DIAMETER (IN) 48.00
REFRACTION CORRECTION - YES
TURBULANCE CORRECTION - YES

TEST DATE 02-27-78
LOCATION C41 ANECH CH
TAPE NO. N299
AERO. RDG. ADH115
IALPHA 8859
PAHS 29.3300
TAMB 38.00
RELHUM 54.00

MODEL TEST POINT 7600
12.2 M (40.0 FT) ARC
154.7 SQ CH (23.99 SQ IN) - MODEL
90.83 M/SEC (298.0 FPS)
FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X76101

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 71.7 | 72.7 | 73.3 | 52.3 | 73.8 | 74.9 | 74.8 | 75.7 | 82.0 | 90.6 | 92.8 | 92.5 | 86.1 | 167.4 |
| 63 | 73.4 | 74.0 | 74.6 | 54.3 | 75.6 | 75.8 | 76.2 | 77.7 | 84.6 | 91.1 | 94.6 | 93.3 | 86.5 | 168.5 |
| 80 | 73.7 | 74.0 | 76.1 | 56.0 | 81.5 | 77.4 | 77.8 | 79.3 | 86.4 | 92.1 | 95.7 | 93.7 | 86.4 | 169.4 |
| 100 | 74.5 | 75.3 | 76.7 | 57.5 | 78.0 | 78.2 | 78.7 | 80.9 | 88.2 | 92.5 | 95.6 | 93.6 | 85.7 | 169.5 |
| 125 | 77.9 | 76.0 | 77.7 | 59.2 | 79.1 | 80.0 | 80.3 | 82.2 | 88.3 | 91.9 | 96.6 | 93.1 | 84.0 | 169.8 |
| 160 | 79.5 | 78.7 | 80.4 | 60.8 | 80.9 | 81.8 | 81.0 | 83.1 | 88.5 | 92.3 | 96.6 | 91.3 | 83.0 | 169.7 |
| 200 | 80.6 | 80.8 | 81.6 | 61.3 | 81.2 | 82.2 | 82.3 | 84.1 | 89.2 | 93.9 | 96.1 | 89.6 | 81.9 | 169.8 |
| 250 | 89.3 | 85.5 | 83.8 | 65.6 | 80.9 | 81.7 | 81.6 | 84.3 | 89.3 | 93.9 | 95.5 | 88.1 | 80.7 | 170.2 |
| 315 | 86.0 | 87.5 | 88.2 | 68.5 | 87.4 | 83.7 | 82.9 | 84.6 | 89.8 | 93.4 | 94.1 | 86.0 | 78.6 | 169.9 |
| 400 | 85.8 | 87.4 | 88.5 | 67.7 | 88.1 | 88.2 | 84.3 | 85.5 | 89.0 | 92.5 | 92.1 | 83.7 | 75.8 | 169.6 |
| 500 | 84.5 | 86.1 | 87.3 | 66.0 | 85.5 | 86.1 | 85.5 | 85.7 | 89.6 | 92.9 | 90.3 | 81.3 | 74.3 | 169.3 |
| 630 | 83.5 | 84.4 | 85.9 | 64.9 | 85.2 | 85.2 | 86.1 | 86.8 | 89.5 | 91.9 | 89.1 | 80.6 | 72.8 | 169.1 |
| 800 | 82.4 | 83.5 | 84.9 | 64.8 | 84.7 | 86.6 | 85.5 | 87.2 | 90.1 | 90.4 | 87.6 | 78.6 | 71.0 | 169.0 |
| 1000 | 81.0 | 82.9 | 84.5 | 65.0 | 85.3 | 86.0 | 85.1 | 87.6 | 89.5 | 89.8 | 85.9 | 77.7 | 69.7 | 168.9 |
| 1250 | 79.8 | 82.2 | 83.6 | 64.6 | 84.8 | 86.3 | 84.7 | 87.1 | 87.1 | 87.6 | 83.5 | 75.0 | 66.7 | 168.3 |
| 1600 | 77.6 | 80.6 | 82.8 | 63.5 | 84.4 | 84.2 | 82.8 | 84.6 | 85.7 | 87.1 | 81.1 | 72.7 | 63.6 | 168.2 |
| 2000 | 74.4 | 78.2 | 80.3 | 62.4 | 83.7 | 84.4 | 81.9 | 83.0 | 83.5 | 82.9 | 77.5 | 69.4 | 59.5 | 167.7 |
| 2500 | 70.6 | 76.2 | 79.0 | 59.6 | 82.6 | 82.4 | 78.6 | 79.6 | 81.2 | 78.8 | 73.2 | 64.7 | 55.6 | 167.7 |
| 3150 | 62.2 | 70.8 | 73.9 | 54.3 | 78.8 | 79.0 | 75.2 | 73.6 | 76.2 | 74.2 | 67.2 | 54.4 | 40.5 | 167.2 |
| 4000 | 54.2 | 61.3 | 67.1 | 50.3 | 71.2 | 70.9 | 67.9 | 67.4 | 68.0 | 65.3 | 57.2 | 41.5 | 24.0 | 166.2 |
| 5000 | 41.8 | 49.7 | 57.5 | 39.8 | 64.1 | 64.8 | 58.6 | 56.9 | 57.5 | 52.0 | 41.7 | 22.8 | | 166.6 |
| 6300 | 18.7 | 30.6 | 39.8 | 22.7 | 46.4 | 46.9 | 43.9 | 39.5 | 41.2 | 31.6 | 18.6 | | | 164.9 |
| 8000 | | | | | 19.6 | 20.6 | 19.9 | 13.7 | 15.2 | 3.4 | | | | 164.0 |
| 10000 | | | | | | | | | | | | | | 162.7 |

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GASPL 94.8 95.2 96.3 76.3 96.3 96.5 95.3 96.9 100.6 104.0 105.6 101.6 94.1 182.2
 PNLT 100.5 101.9 103.5 84.0 105.5 105.6 103.7 104.8 107.3 109.2 108.7 102.2 94.1
 PNLT 101.7 101.9 104.2 84.0 106.7 106.9 104.2 104.8 107.8 109.2 108.7 102.2 95.3

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 38.00
 LOCATION C41 ANECH CH AERG. RDG. ADH115 PAMB 29.3300 RELHUM 54.00

MODEL TEST POINT 7610 ACQUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 90.83 M/SEC (288.0 FPS)
 FREE-JET SPEED

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X76110
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ
50
63
80
100
125
160
200

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| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 62.8 | 65.9 | 65.6 | 67.0 | 68.1 | 69.7 | 72.4 | 74.6 | 77.5 | 103.9 | 109.0 | 113.0 | 112.9 | 145.9 |
| 315 | 64.3 | 65.5 | 66.3 | 67.1 | 68.5 | 70.9 | 71.5 | 74.2 | 77.1 | 106.5 | 110.6 | 114.3 | 112.5 | 147.0 |
| 400 | 66.3 | 66.6 | 67.5 | 67.4 | 69.0 | 71.6 | 72.3 | 74.4 | 77.9 | 109.8 | 113.9 | 115.8 | 111.5 | 148.8 |
| 500 | 66.7 | 67.2 | 68.9 | 69.0 | 72.6 | 73.0 | 73.9 | 76.0 | 79.4 | 101.5 | 111.8 | 115.7 | 108.6 | 149.7 |
| 630 | 67.5 | 68.3 | 70.1 | 69.6 | 71.5 | 73.6 | 73.2 | 75.4 | 78.4 | 104.1 | 112.4 | 116.6 | 114.8 | 150.9 |
| 800 | 70.1 | 68.6 | 70.9 | 72.2 | 72.5 | 74.9 | 76.5 | 79.9 | 80.5 | 113.2 | 117.6 | 113.8 | 103.7 | 150.5 |
| 1000 | 91.7 | 91.0 | 93.0 | 92.5 | 93.8 | 96.5 | 97.9 | 101.3 | 106.5 | 113.1 | 116.7 | 111.9 | 101.5 | 149.8 |
| 1250 | 94.5 | 95.8 | 96.3 | 94.6 | 95.2 | 97.8 | 98.7 | 102.1 | 107.1 | 112.7 | 117.0 | 110.7 | 100.6 | 149.9 |
| 1600 | 104.1 | 101.7 | 99.0 | 96.5 | 96.3 | 98.7 | 100.1 | 103.2 | 108.2 | 113.5 | 115.8 | 108.7 | 100.7 | 150.2 |
| 2000 | 103.0 | 103.8 | 104.0 | 102.3 | 97.9 | 98.3 | 100.1 | 104.1 | 109.3 | 114.6 | 116.1 | 108.8 | 100.8 | 150.6 |
| 2500 | 101.9 | 102.4 | 103.4 | 104.2 | 104.1 | 101.4 | 101.5 | 104.5 | 109.2 | 115.3 | 116.0 | 108.7 | 100.7 | 151.0 |
| 3150 | 99.9 | 100.2 | 101.8 | 102.5 | 103.1 | 105.5 | 103.3 | 105.8 | 110.3 | 114.6 | 115.3 | 109.0 | 100.7 | 150.8 |
| 4000 | 99.3 | 99.4 | 100.2 | 100.1 | 101.0 | 103.8 | 104.5 | 105.9 | 109.4 | 114.0 | 114.2 | 107.4 | 99.9 | 150.0 |
| 5000 | 99.0 | 99.1 | 100.2 | 100.1 | 100.4 | 102.6 | 103.9 | 107.1 | 109.4 | 114.1 | 112.9 | 106.1 | 98.6 | 149.8 |
| 6300 | 97.7 | 98.9 | 100.4 | 99.6 | 100.1 | 103.0 | 104.4 | 107.4 | 109.8 | 113.8 | 110.8 | 104.3 | 98.0 | 149.6 |
| 8000 | 97.4 | 98.4 | 99.5 | 99.8 | 100.3 | 102.2 | 103.5 | 106.4 | 109.9 | 111.8 | 110.0 | 103.4 | 96.9 | 149.0 |
| 10000 | 96.3 | 97.6 | 99.2 | 99.0 | 100.8 | 102.5 | 102.6 | 106.0 | 109.0 | 111.5 | 108.5 | 102.7 | 96.1 | 148.9 |
| 12500 | 95.2 | 97.0 | 97.7 | 98.5 | 99.9 | 101.3 | 101.5 | 104.7 | 106.6 | 109.2 | 106.1 | 100.5 | 95.0 | 147.8 |
| 16000 | 94.1 | 96.1 | 97.4 | 97.9 | 100.2 | 101.5 | 100.2 | 103.6 | 105.3 | 108.2 | 104.2 | 99.3 | 94.5 | 148.1 |
| 20000 | 89.8 | 93.7 | 95.3 | 96.0 | 99.2 | 100.2 | 97.9 | 100.3 | 103.0 | 104.6 | 101.2 | 97.0 | 92.4 | 147.3 |
| 25000 | 88.6 | 90.3 | 93.6 | 93.0 | 97.0 | 97.9 | 95.5 | 95.3 | 100.4 | 100.2 | 96.9 | 93.4 | 90.6 | 145.4 |
| 31500 | 86.8 | 86.5 | 90.8 | 92.5 | 92.4 | 92.9 | 91.8 | 92.7 | 97.3 | 97.9 | 94.6 | 88.6 | 85.1 | 146.4 |
| 40000 | 82.2 | 82.4 | 85.4 | 86.4 | 90.3 | 90.7 | 87.1 | 87.9 | 91.9 | 92.1 | 89.7 | 83.2 | 81.1 | 145.8 |
| 50000 | 74.6 | 75.3 | 78.3 | 80.3 | 82.1 | 83.9 | 82.6 | 81.4 | 86.6 | 86.0 | 83.1 | 78.3 | 75.1 | 143.9 |
| 63000 | 69.1 | 69.2 | 71.3 | 74.0 | 74.2 | 75.4 | 76.7 | 74.7 | 82.0 | 79.8 | 76.6 | 72.1 | 69.3 | 143.1 |
| 80000 | 62.9 | 62.4 | 65.2 | 68.9 | 67.2 | 69.6 | 69.7 | 69.0 | 75.6 | 73.5 | 71.7 | 63.6 | 61.2 | 143.6 |
| GASPL | 110.7 | 111.0 | 111.7 | 111.6 | 112.4 | 113.6 | 113.9 | 116.7 | 120.4 | 125.4 | 127.2 | 124.0 | 118.8 | 162.9 |

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 38.00
LOCATION C41 ANECH CH AERO. RDG. ADH116 PAMB 29.3300 RELHUM 53.70

MODEL TEST POINT 7611 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 164.7 SQ CM (23.99 SQ IN) - MODEL 117.96 M/SEC (387.0 FPS) FREE-JET SPEED

703

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X76110

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PUL

50

63

80

100

125

160

200

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 90.3 | 92.0 | 90.3 | 90.1 | 89.6 | 89.7 | 90.5 | 91.1 | 95.8 | 102.2 | 105.9 | 110.0 | 109.9 | 143.2 |
| 315 | 90.3 | 92.0 | 90.3 | 90.1 | 90.2 | 91.0 | 90.2 | 91.5 | 97.4 | 106.4 | 110.1 | 112.6 | 110.8 | 145.9 |
| 400 | 91.7 | 91.7 | 91.1 | 90.4 | 90.7 | 91.9 | 91.4 | 92.4 | 100.0 | 109.9 | 113.9 | 115.2 | 111.5 | 148.6 |
| 500 | 93.1 | 92.3 | 92.0 | 90.5 | 94.5 | 93.3 | 93.2 | 94.4 | 102.5 | 110.5 | 114.9 | 115.1 | 110.8 | 149.1 |
| 630 | 94.1 | 93.4 | 93.7 | 92.4 | 103.9 | 94.0 | 94.4 | 96.5 | 104.2 | 111.6 | 116.4 | 115.4 | 111.2 | 150.3 |
| 800 | 97.6 | 96.7 | 96.6 | 94.1 | 94.5 | 95.4 | 95.7 | 98.0 | 105.5 | 111.9 | 116.2 | 114.8 | 111.6 | 150.1 |
| 1000 | 97.4 | 94.7 | 95.7 | 95.6 | 95.6 | 97.1 | 97.2 | 99.4 | 106.1 | 111.5 | 116.5 | 113.5 | 110.7 | 149.9 |
| 1250 | 98.5 | 96.8 | 97.7 | 95.9 | 96.9 | 98.6 | 98.1 | 100.3 | 107.3 | 112.4 | 116.3 | 111.6 | 110.9 | 149.9 |
| 1600 | 99.5 | 100.2 | 98.9 | 97.3 | 98.3 | 99.7 | 99.7 | 101.6 | 108.7 | 113.8 | 115.9 | 111.9 | 111.2 | 150.3 |
| 2000 | 111.3 | 107.8 | 103.7 | 99.9 | 100.0 | 99.5 | 100.0 | 102.7 | 108.9 | 114.7 | 116.1 | 112.1 | 111.4 | 151.5 |
| 2500 | 109.6 | 109.3 | 108.3 | 105.4 | 106.6 | 102.9 | 101.7 | 103.4 | 110.5 | 114.7 | 116.0 | 113.1 | 112.2 | 152.3 |
| 3150 | 107.1 | 107.1 | 107.5 | 107.4 | 105.2 | 107.4 | 103.9 | 105.1 | 110.2 | 114.6 | 115.4 | 111.8 | 111.6 | 152.1 |
| 4000 | 107.3 | 106.6 | 107.1 | 106.7 | 104.5 | 106.2 | 105.6 | 105.8 | 110.3 | 114.6 | 113.8 | 110.1 | 109.7 | 151.5 |
| 5000 | 106.6 | 105.8 | 105.7 | 104.6 | 104.4 | 105.6 | 105.4 | 107.3 | 110.7 | 114.3 | 111.7 | 108.2 | 108.8 | 151.0 |
| 6300 | 106.2 | 105.6 | 105.8 | 104.9 | 104.1 | 106.0 | 105.9 | 107.5 | 111.0 | 112.5 | 111.1 | 107.5 | 108.0 | 150.7 |
| 8000 | 104.7 | 105.2 | 105.9 | 104.2 | 104.3 | 105.2 | 105.0 | 106.5 | 110.3 | 112.3 | 109.7 | 106.9 | 107.2 | 150.5 |
| 10000 | 104.2 | 104.5 | 104.8 | 104.2 | 104.6 | 105.5 | 104.1 | 106.1 | 108.5 | 110.7 | 108.1 | 105.8 | 107.5 | 150.1 |
| 12500 | 102.9 | 103.5 | 104.3 | 103.2 | 103.9 | 104.3 | 103.4 | 105.2 | 108.0 | 110.5 | 107.2 | 105.6 | 108.1 | 150.3 |
| 16000 | 101.3 | 102.4 | 102.3 | 102.1 | 104.2 | 104.5 | 102.2 | 104.3 | 106.6 | 108.1 | 105.3 | 104.4 | 107.0 | 150.4 |
| 20000 | 99.7 | 101.1 | 101.6 | 101.1 | 103.7 | 103.2 | 100.2 | 101.5 | 105.6 | 105.2 | 102.3 | 101.7 | 105.7 | 150.4 |
| 25000 | 97.5 | 100.3 | 100.5 | 99.7 | 101.5 | 100.9 | 97.9 | 97.1 | 102.0 | 102.4 | 99.6 | 97.0 | 100.8 | 150.2 |
| 31500 | 95.5 | 96.1 | 98.0 | 95.9 | 96.4 | 95.9 | 94.0 | 93.6 | 98.4 | 98.5 | 96.7 | 93.5 | 98.4 | 149.6 |
| 40000 | 90.2 | 89.3 | 92.7 | 93.4 | 94.8 | 93.7 | 89.5 | 89.5 | 93.5 | 92.7 | 90.5 | 88.9 | 92.8 | 149.3 |
| 50000 | 87.9 | 86.9 | 88.5 | 88.1 | 86.7 | 86.9 | 85.0 | 83.0 | 89.5 | 87.2 | 84.6 | 83.4 | 87.8 | 148.5 |
| 63000 | 79.4 | 78.9 | 80.5 | 81.1 | 78.2 | 78.4 | 79.0 | 76.1 | 84.0 | 81.5 | 80.2 | 75.5 | 80.7 | 146.8 |
| 80000 | 69.7 | 69.1 | 70.4 | 72.2 | 71.7 | 72.6 | 70.9 | 69.9 | 74.1 | 71.7 | 70.4 | 65.7 | 70.8 | 144.9 |

OASPL 117.5 116.6 116.5 115.4 115.8 116.0 114.9 116.4 121.0 125.1 126.8 124.8 123.2 164.1

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 387.00 REFRACTION CORRECTION - YES
 FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 3859 TAMB 38.00
 LOCATION C41 ANECH CH AERO. RDG. ADH116 PAMB 29.3300 RELHUM 53.70

MODEL TEST POINT 7611 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.96 M/SEC (387.0 FPS)
 FREE-JET SPEED

ORIGINAL PAGE IS
OF POOR QUALITY

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X76111

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 69.9 | 71.5 | 71.9 | 71.9 | 72.7 | 74.0 | 73.4 | 73.9 | 80.6 | 89.7 | 92.1 | 91.2 | 84.2 | 166.3 |
| 63 | 71.3 | 72.1 | 72.8 | 72.1 | 76.4 | 75.4 | 75.1 | 75.9 | 83.3 | 90.2 | 93.1 | 91.1 | 83.4 | 166.8 |
| 80 | 72.2 | 73.1 | 74.4 | 73.8 | 85.6 | 76.0 | 76.3 | 76.0 | 85.0 | 91.2 | 94.6 | 91.3 | 83.7 | 167.9 |
| 100 | 75.7 | 76.3 | 77.3 | 75.5 | 76.3 | 77.3 | 77.5 | 79.4 | 86.2 | 91.5 | 94.3 | 90.6 | 84.0 | 167.8 |
| 125 | 75.3 | 74.3 | 76.3 | 76.9 | 77.6 | 79.0 | 78.9 | 80.8 | 86.7 | 91.0 | 94.4 | 89.2 | 82.8 | 167.8 |
| 160 | 76.2 | 76.2 | 76.1 | 77.1 | 78.6 | 80.4 | 79.6 | 81.5 | 87.6 | 91.8 | 94.0 | 87.0 | 82.7 | 167.5 |
| 200 | 77.0 | 79.3 | 79.2 | 78.4 | 79.8 | 81.3 | 81.2 | 82.7 | 89.0 | 92.9 | 93.4 | 87.0 | 82.5 | 168.0 |
| 250 | 88.5 | 86.7 | 83.8 | 80.7 | 81.3 | 80.9 | 81.3 | 83.5 | 89.0 | 93.6 | 93.2 | 86.8 | 82.1 | 169.2 |
| 315 | 86.4 | 87.6 | 88.1 | 86.0 | 87.5 | 84.1 | 82.7 | 83.9 | 90.3 | 93.2 | 92.8 | 87.2 | 82.1 | 170.0 |
| 400 | 83.3 | 85.2 | 86.9 | 87.7 | 86.9 | 88.2 | 84.6 | 85.4 | 89.6 | 92.8 | 91.7 | 85.3 | 80.4 | 169.7 |
| 500 | 83.0 | 84.4 | 86.2 | 86.7 | 84.9 | 86.9 | 86.0 | 85.8 | 89.4 | 92.3 | 89.6 | 82.9 | 77.6 | 169.2 |
| 630 | 81.9 | 83.2 | 84.4 | 84.3 | 84.6 | 85.9 | 85.6 | 86.9 | 89.4 | 91.6 | 86.9 | 80.3 | 75.6 | 168.7 |
| 800 | 81.0 | 82.6 | 84.3 | 84.3 | 84.0 | 85.1 | 85.8 | 86.9 | 89.5 | 89.5 | 85.8 | 78.9 | 73.6 | 168.4 |
| 1000 | 79.1 | 81.9 | 84.1 | 83.4 | 84.1 | 85.2 | 84.8 | 85.7 | 88.5 | 89.0 | 84.0 | 77.6 | 71.7 | 168.2 |
| 1250 | 78.1 | 80.9 | 82.6 | 83.3 | 84.5 | 85.3 | 83.8 | 85.1 | 86.5 | 87.0 | 82.0 | 75.7 | 70.6 | 167.7 |
| 1600 | 75.9 | 79.2 | 81.9 | 81.9 | 83.3 | 83.9 | 82.8 | 83.9 | 85.5 | 86.3 | 80.2 | 74.2 | 68.8 | 168.0 |
| 2000 | 73.3 | 77.6 | 79.5 | 80.6 | 83.4 | 83.9 | 81.4 | 82.8 | 83.6 | 83.2 | 77.3 | 71.3 | 64.7 | 168.0 |
| 2500 | 69.9 | 75.0 | 77.9 | 78.9 | 82.3 | 82.1 | 78.6 | 79.3 | 82.0 | 79.1 | 72.5 | 65.8 | 58.5 | 168.1 |
| 3150 | 64.4 | 71.8 | 74.9 | 75.9 | 78.6 | 78.5 | 75.2 | 73.4 | 76.5 | 73.9 | 66.5 | 58.1 | 45.2 | 167.8 |
| 4000 | 56.2 | 62.8 | 68.6 | 68.9 | 70.7 | 70.6 | 68.3 | 66.6 | 69.0 | 65.3 | 57.3 | 43.7 | 28.3 | 167.2 |
| 5000 | 41.1 | 48.5 | 57.1 | 61.0 | 64.1 | 63.6 | 58.6 | 57.1 | 57.9 | 51.9 | 41.3 | 26.5 | 0.8 | 167.0 |
| 6300 | 20.9 | 31.9 | 40.6 | 44.8 | 45.9 | 46.8 | 44.2 | 38.8 | 41.9 | 32.2 | 17.7 | | | 166.1 |
| 8000 | | | 11.5 | 18.6 | 19.3 | 20.6 | 20.1 | 13.6 | 14.9 | 1.6 | | | | 164.5 |
| 10000 | | | | | | | | | | | | | | 162.6 |

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|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| CASPL | 93.5 | 94.4 | 95.4 | 95.0 | 96.0 | 96.2 | 96.1 | 96.1 | 100.1 | 103.4 | 103.9 | 99.4 | 93.3 | 181.6 |
| PNL | 99.4 | 101.1 | 102.6 | 103.0 | 105.2 | 105.3 | 103.3 | 104.3 | 107.2 | 106.8 | 107.1 | 101.4 | 95.6 | |
| PMLT | 100.6 | 101.1 | 103.4 | 103.6 | 106.5 | 106.3 | 103.9 | 104.3 | 107.6 | 109.4 | 107.1 | 101.4 | 96.7 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78
 LOCATION C41 ANECH CH
 TAPE NO. N299
 AERO. RDG. ADH116
 ALPHA 8859
 PAMB 29.3300
 TAMB 38.00
 RELHUM 53.70

MODEL TEST POINT 7611
 ACUSTIC RANGE 731.5 M (2400.0 FT) SL
 9032.2 SQ CM (1400.00 SQ IN) - FULL
 SIZE 117.96 M/SEC (387.0 FPS)
 FREE-JET SPEED

08/30/79 19.452

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X76120
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50
60
63
80

100

125

160

200

250 67.8 92.6 91.1 91.9 92.0 94.6 96.6 98.9 103.8 109.1 113.0 116.5 116.1 149.7
315 88.6 91.7 91.9 92.0 94.1 95.7 96.6 99.0 106.4 111.2 114.9 117.6 116.5 151.0
400 90.2 92.7 93.0 92.5 94.1 96.0 97.3 99.7 107.2 114.6 117.4 118.6 116.3 152.7
500 91.5 93.8 94.5 94.3 95.2 97.5 98.9 101.1 108.8 116.4 119.2 119.9 116.8 154.1
630 92.6 95.6 95.4 95.2 97.3 98.6 100.3 103.4 110.7 116.5 119.6 120.3 117.7 154.6
800 96.9 96.2 96.4 97.2 97.6 99.9 101.1 104.5 112.4 117.3 120.1 121.1 118.2 155.3
1000 100.0 101.3 101.0 99.3 99.4 100.8 102.9 105.1 113.6 116.6 119.7 120.9 117.6 155.1
1250 97.8 101.9 101.7 101.4 101.8 103.1 103.8 106.7 113.8 116.0 120.9 121.0 116.4 155.5
1600 102.7 101.3 100.1 100.1 101.2 103.3 104.2 107.3 114.6 116.9 121.4 119.6 115.8 155.5
2000 103.9 104.9 102.9 101.0 100.0 102.1 104.3 107.5 115.1 117.6 120.2 117.2 112.2 154.8
2500 104.3 104.6 104.4 103.6 102.5 103.3 105.2 108.1 115.0 118.7 119.4 115.3 110.6 154.7
3150 102.8 104.4 104.2 104.4 104.5 104.6 105.2 108.9 115.3 118.2 114.1 109.4 154.2
4000 101.9 102.8 102.8 102.5 103.6 104.9 105.3 108.8 114.4 117.2 116.1 112.5 107.0 153.1
5000 100.8 102.4 102.9 102.9 103.4 105.3 106.4 109.4 113.8 116.8 114.9 111.3 106.3 152.8
6300 99.0 101.9 102.7 102.6 103.4 105.5 106.4 108.6 113.6 116.0 114.1 110.1 105.6 152.4
8000 98.4 101.5 101.6 102.5 103.3 105.0 105.8 108.4 112.8 114.4 112.5 109.9 104.4 151.8
10000 97.0 101.1 101.5 102.1 103.5 105.4 105.0 108.1 111.2 113.4 110.9 108.2 102.8 151.3
12500 94.3 99.4 100.1 101.7 102.8 104.2 103.6 106.7 108.9 111.1 108.6 106.1 101.6 150.2
16000 92.6 98.1 99.1 100.2 102.4 103.9 102.1 105.0 106.9 109.6 106.3 103.8 99.8 150.0
20000 87.6 95.4 96.7 98.0 101.3 102.4 99.8 101.9 104.0 106.0 102.9 100.9 97.4 149.0
25000 86.6 91.2 93.7 94.6 98.9 100.1 96.9 97.1 101.2 101.5 99.1 96.6 95.2 148.0
31500 84.9 88.0 91.2 92.8 94.1 94.2 93.1 93.8 96.5 100.0 94.9 91.1 89.0 147.4
40000 79.6 82.7 86.2 87.9 91.6 91.9 87.9 89.2 91.7 94.6 90.3 85.4 84.8 147.0
50000 72.7 76.3 78.7 81.0 83.7 85.2 83.4 82.3 87.8 88.5 85.1 81.1 78.5 145.4
63000 67.4 70.3 72.9 74.8 75.4 77.1 77.1 76.2 83.6 82.0 78.3 76.1 73.4 144.7
80000 61.4 63.2 68.2 70.1 69.8 73.5 70.0 70.7 77.8 77.6 72.8 69.3 66.0 146.2

OASPL 112.3 113.9 113.8 113.8 114.6 116.1 116.6 119.5 125.4 128.7 130.6 130.1 127.0 166.6

TEST DATE 02-21-78 TAPE NO. N294 ALPHA SB59 TANS 24.80
LOCATION C41 ANECH CH AERO. RDG. ADH094 PAMB 29.3580 RELHUM 39.00

MODEL TEST POINT ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED 0. M/SEC (0. FPS)

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08/30/79 19.452

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X76120

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

OASPL

112.3

113.8

114.6

116.1

116.6

119.5

125.4

128.7

130.6

130.1

127.0

166.6

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 0. REFRACTION CORRECTION - YES TURBULANCE CORRECTION - YES

TEST DATE 02-21-78 TAPE NO. N294 ALPHA SB59 TAMB 24.80
LOCATION C41 ANECH CH AERO. RDG. ADH094 PAMB 29.3580 RELHUM 39.00

MODEL TEST POINT 7612 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X76121

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 68.4 | 72.4 | 73.8 | 74.0 | 76.0 | 78.0 | 79.3 | 81.3 | 88.0 | 94.5 | 95.6 | 94.9 | 88.9 | 170.4 |
| 63 | 69.7 | 73.5 | 75.3 | 75.9 | 77.1 | 79.6 | 80.9 | 82.6 | 89.6 | 96.1 | 97.4 | 95.9 | 89.5 | 171.7 |
| 80 | 70.7 | 75.3 | 76.2 | 76.7 | 79.2 | 80.7 | 82.2 | 84.9 | 91.4 | 96.2 | 97.7 | 96.2 | 90.2 | 172.2 |
| 100 | 74.9 | 75.8 | 77.2 | 78.7 | 79.4 | 81.9 | 82.9 | 85.9 | 93.2 | 96.9 | 98.2 | 96.9 | 90.6 | 173.0 |
| 125 | 77.9 | 80.8 | 81.7 | 80.7 | 81.2 | 82.7 | 84.7 | 86.4 | 94.2 | 96.1 | 97.7 | 96.6 | 89.7 | 172.8 |
| 160 | 75.6 | 81.3 | 82.2 | 82.7 | 83.4 | 84.9 | 85.4 | 87.9 | 94.3 | 95.4 | 98.6 | 96.4 | 88.2 | 173.1 |
| 200 | 80.2 | 80.5 | 80.4 | 81.2 | 82.7 | 84.9 | 85.7 | 88.4 | 94.8 | 96.1 | 98.9 | 94.7 | 87.1 | 173.2 |
| 250 | 81.1 | 83.8 | 83.0 | 81.8 | 81.3 | 83.6 | 85.6 | 88.3 | 95.2 | 96.7 | 97.4 | 91.8 | 82.8 | 172.5 |
| 315 | 81.1 | 83.2 | 84.1 | 84.2 | 83.5 | 84.5 | 86.2 | 88.7 | 94.8 | 97.3 | 96.2 | 89.5 | 80.4 | 172.4 |
| 400 | 79.1 | 82.5 | 83.6 | 84.7 | 85.2 | 85.5 | 86.0 | 89.2 | 94.7 | 96.2 | 94.5 | 87.6 | 78.2 | 171.9 |
| 500 | 77.7 | 80.5 | 81.9 | 82.5 | 84.0 | 85.6 | 85.8 | 88.7 | 93.5 | 94.9 | 91.8 | 85.3 | 74.8 | 170.8 |
| 630 | 76.1 | 79.7 | 81.7 | 82.5 | 83.6 | 85.6 | 86.6 | 89.0 | 92.6 | 94.2 | 90.2 | 83.5 | 73.1 | 170.4 |
| 800 | 73.8 | 78.9 | 81.1 | 82.0 | 83.3 | 85.6 | 86.4 | 88.0 | 92.0 | 93.0 | 88.9 | 81.5 | 71.2 | 170.1 |
| 1000 | 72.8 | 78.2 | 79.9 | 81.7 | 83.1 | 84.9 | 85.6 | 87.6 | 91.0 | 91.1 | 86.8 | 80.7 | 68.9 | 169.4 |
| 1250 | 70.9 | 77.5 | 79.5 | 81.2 | 83.2 | 85.3 | 84.7 | 87.2 | 89.2 | 89.8 | 84.7 | 78.1 | 65.9 | 168.9 |
| 1600 | 67.3 | 75.2 | 77.7 | 80.4 | 82.1 | 83.7 | 83.0 | 85.4 | 86.4 | 86.9 | 81.6 | 74.7 | 62.3 | 167.9 |
| 2000 | 64.6 | 73.2 | 76.3 | 78.7 | 81.6 | 83.4 | 81.3 | 83.5 | 84.1 | 84.8 | 78.3 | 70.8 | 57.4 | 167.6 |
| 2500 | 57.8 | 69.3 | 73.0 | 75.9 | 80.0 | 81.3 | 78.5 | 79.7 | 80.3 | 79.9 | 73.1 | 65.1 | 50.2 | 166.6 |
| 3150 | 53.5 | 62.7 | 68.2 | 70.8 | 76.2 | 77.7 | 74.2 | 73.4 | 75.7 | 73.0 | 66.0 | 55.7 | 38.6 | 165.6 |
| 4000 | 45.5 | 54.7 | 61.8 | 65.8 | 68.4 | 68.9 | 67.4 | 66.8 | 67.1 | 66.8 | 55.5 | 41.4 | 18.9 | 165.1 |
| 5000 | 30.5 | 41.9 | 50.5 | 55.4 | 60.9 | 61.7 | 57.2 | 56.7 | 56.0 | 53.8 | 41.1 | 21.9 | 164.6 | |
| 6300 | 5.8 | 21.3 | 31.1 | 37.8 | 42.9 | 45.2 | 42.6 | 39.1 | 40.1 | 33.5 | 18.2 | | 163.1 | |
| 8000 | | | 3.9 | 12.4 | 16.5 | 19.3 | 18.2 | 13.8 | 14.6 | 2.2 | | | 162.3 | |
| 10000 | | | | | | | | | | | | | 163.8 | |

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OASPL 88.8 92.0 93.0 93.7 94.9 96.5 97.1 99.5 104.9 107.2 107.7 105.0 98.1 184.1
PNL 93.5 97.7 99.6 101.3 103.6 105.2 104.4 106.5 110.4 111.9 110.5 105.9 97.4
PNLT 94.5 97.7 99.6 101.3 104.6 106.2 104.9 106.5 111.0 112.5 110.5 105.9 98.5

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-21-78 TAPE NO. N294 ALPHA SB59 TAMB 24.80
LOCATION C41 ANECH CH AERO. RDG. ADH094 PAMB 29.3580 RELHUM 39.00

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
7600 7612 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 38 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X76130
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

10000000

12500000

16000000

20000000

25000000

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TEST DATE 02-27-78 TAPE NO. N299 ALPHA 3859 TAMB 38.00
LOCATION C41 ANECH CH AERO. RDG. ADH118 PAMB 29.3300 RELHUM 64.70

MODEL TEST POINT 7613 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 90.83 M/SEC (298.0 FPS) FREE-JET SPEED

709

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X76130

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

50

60

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

OASPL

115.2

115.4

115.5

115.7

114.7

116.9

121.6

125.0

127.4

126.3

122.7

164.3

ORIGINAL PAGE 19
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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) 298.00 REFRACTION CORRECTION - YES TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA 5859 TAPB 36.00
LOCATION C41 ANECH CH AERO. RDG. ADH118 PAMB 29.3300 RELHUM 54.70

MODEL TEST POINT 7600 7613 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 164.7 SQ CH (23.99 SQ IN) - MODEL 90.63 M/SEC (298.0 FPS) FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X76131

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 69.2 | 71.1 | 71.6 | 72.3 | 73.2 | 74.2 | 74.8 | 75.7 | 81.5 | 90.1 | 92.9 | 92.4 | 85.7 | 167.3 |
| 63 | 70.6 | 71.5 | 73.2 | 74.1 | 75.2 | 75.5 | 76.0 | 77.0 | 84.4 | 91.1 | 94.1 | 93.3 | 86.0 | 168.3 |
| 80 | 71.7 | 72.6 | 74.4 | 75.8 | 83.7 | 76.9 | 76.8 | 79.6 | 86.6 | 91.4 | 94.9 | 93.4 | 85.2 | 168.8 |
| 100 | 74.5 | 75.1 | 76.7 | 76.9 | 77.0 | 77.9 | 78.5 | 80.9 | 87.7 | 91.6 | 94.6 | 92.8 | 85.0 | 168.7 |
| 125 | 74.6 | 74.2 | 75.3 | 77.4 | 77.7 | 79.0 | 79.6 | 81.2 | 87.8 | 92.6 | 95.1 | 92.3 | 82.0 | 168.6 |
| 160 | 75.8 | 75.2 | 77.6 | 79.5 | 80.2 | 80.8 | 80.8 | 82.8 | 88.5 | 91.3 | 94.6 | 90.3 | 81.2 | 168.2 |
| 200 | 75.9 | 78.2 | 79.6 | 78.9 | 79.9 | 81.4 | 81.8 | 83.6 | 89.5 | 92.9 | 93.8 | 98.4 | 80.7 | 168.3 |
| 250 | 82.2 | 79.0 | 79.0 | 81.2 | 79.4 | 80.4 | 81.3 | 84.0 | 89.4 | 92.5 | 94.1 | 87.6 | 80.4 | 168.7 |
| 315 | 83.3 | 84.3 | 84.0 | 85.5 | 83.4 | 81.7 | 82.6 | 84.3 | 89.9 | 92.0 | 93.0 | 86.5 | 78.8 | 168.9 |
| 400 | 82.5 | 83.9 | 85.5 | 85.5 | 85.3 | 85.0 | 82.9 | 85.1 | 89.7 | 91.8 | 91.6 | 84.4 | 76.4 | 168.8 |
| 500 | 80.4 | 83.0 | 85.5 | 84.8 | 84.2 | 85.4 | 83.8 | 85.4 | 89.6 | 92.1 | 89.5 | 82.0 | 74.6 | 168.6 |
| 630 | 80.3 | 81.2 | 83.5 | 83.9 | 83.9 | 85.4 | 84.8 | 86.2 | 90.0 | 91.6 | 88.9 | 80.6 | 73.3 | 168.7 |
| 800 | 79.7 | 81.4 | 83.1 | 84.0 | 84.1 | 85.6 | 85.0 | 86.5 | 90.1 | 90.4 | 86.9 | 79.1 | 71.5 | 168.6 |
| 1000 | 78.5 | 81.0 | 83.7 | 84.7 | 84.9 | 85.5 | 85.1 | 86.8 | 89.3 | 89.8 | 85.2 | 77.7 | 69.2 | 168.7 |
| 1250 | 77.3 | 80.9 | 82.9 | 84.1 | 85.1 | 86.1 | 84.7 | 86.6 | 87.9 | 87.2 | 83.1 | 79.5 | 66.5 | 168.3 |
| 1600 | 75.6 | 79.5 | 82.0 | 82.9 | 84.0 | 84.7 | 83.7 | 84.8 | 86.5 | 86.6 | 80.9 | 73.5 | 64.2 | 168.4 |
| 2000 | 72.5 | 77.6 | 79.6 | 82.6 | 84.1 | 84.4 | 82.2 | 83.5 | 84.3 | 82.7 | 77.1 | 69.5 | 59.3 | 168.1 |
| 2500 | 68.4 | 74.3 | 78.3 | 80.4 | 83.6 | 82.9 | 78.9 | 80.4 | 82.0 | 78.9 | 73.3 | 65.1 | 56.3 | 168.4 |
| 3150 | 62.2 | 70.8 | 74.4 | 75.6 | 79.9 | 79.3 | 75.5 | 74.7 | 77.0 | 74.5 | 67.0 | 54.7 | 41.1 | 168.0 |
| 4000 | 54.2 | 61.6 | 66.9 | 70.7 | 71.6 | 71.2 | 69.3 | 67.7 | 68.7 | 65.2 | 56.8 | 41.1 | 23.0 | 167.1 |
| 5000 | 38.8 | 48.3 | 56.5 | 60.6 | 65.2 | 64.4 | 59.3 | 57.6 | 58.1 | 51.8 | 41.8 | 23.1 | | 167.1 |
| 6300 | 19.2 | 30.4 | 40.4 | 43.5 | 47.0 | 47.4 | 44.0 | 40.0 | 42.1 | 31.9 | 18.0 | | | 165.8 |
| 8000 | | | 10.3 | 16.9 | 20.3 | 21.2 | 20.0 | 14.0 | 16.9 | 3.5 | | | | 164.9 |
| 10000 | | | | | | | | | | | | | | 163.7 |

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DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 38.00
 LOCATION C41 ANECH CH AERO. RDG. ADH118 PAMB 29.330G RELHUM 54.70

MODEL TEST POINT 7613 ACQUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 90.83 M/SEC (298.0 FPS) FREE-JET SPEED

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X76140
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

300

350

400

450

500

550

600

650

700

750

800

850

900

950

1000

1050

1100

1150

1200

1250

1300

1350

1400

1450

1500

1550

1600

1650

1700

1750

1800

1850

1900

1950

2000

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TEST DATE 02-27-78

LOCATION C41 ANECH CH

TAPE NO. N299

AERG. RDG. ADH117

I ALPHA SB59

PAMB 29.3300 RELHUM 54.60

MODEL TEST POINT

7614

ACOUSTIC RANGE

12.2 M (40.0 FT)

SIZE

154.7 SQ CM (23.99 SQ IN)

FREE-JET SPEED

117.96 M/SEC (387.0 FPS)

OASPL 110.1 109.8 111.1 110.9 112.2 113.3 113.9 116.9 120.9 124.9 126.8 123.7 118.6 162.8

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, '38 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X76140

ANGLES MEASURED FROM INLET, DEGREES

FREQ 40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | 50.5 | 92.2 | 90.3 | 90.6 | 89.6 | 90.0 | 90.0 | 91.3 | 95.5 | 102.5 | 106.4 | 110.5 | 109.9 | 143.5 |
| 63 | 90.5 | 92.2 | 90.3 | 90.6 | 90.2 | 90.8 | 90.7 | 91.7 | 97.9 | 106.7 | 110.9 | 112.8 | 110.9 | 146.2 |
| 80 | 91.4 | 92.0 | 91.3 | 90.2 | 90.9 | 91.6 | 91.6 | 92.8 | 100.0 | 109.2 | 114.1 | 116.2 | 111.5 | 148.6 |
| 100 | 93.0 | 92.3 | 92.5 | 90.8 | 94.2 | 92.8 | 93.2 | 94.9 | 102.0 | 110.2 | 114.9 | 114.9 | 110.8 | 149.0 |
| 125 | 94.3 | 93.6 | 94.2 | 92.1 | 102.9 | 94.7 | 94.4 | 96.7 | 104.6 | 111.0 | 115.9 | 115.3 | 111.6 | 149.9 |
| 160 | 97.9 | 96.7 | 97.1 | 94.4 | 94.7 | 95.4 | 95.5 | 98.1 | 106.2 | 111.2 | 115.5 | 113.5 | 111.3 | 149.4 |
| 200 | 97.3 | 94.7 | 96.0 | 95.1 | 95.9 | 96.8 | 97.4 | 99.4 | 106.5 | 110.9 | 115.1 | 112.4 | 109.1 | 148.9 |
| 250 | 98.5 | 96.2 | 97.8 | 96.2 | 97.3 | 97.8 | 98.1 | 100.5 | 108.0 | 111.6 | 114.7 | 110.7 | 109.3 | 148.9 |
| 315 | 98.6 | 99.3 | 99.5 | 97.8 | 98.5 | 99.2 | 99.6 | 101.6 | 109.0 | 113.3 | 114.2 | 109.7 | 109.0 | 149.3 |
| 400 | 112.2 | 106.2 | 102.7 | 99.8 | 98.2 | 99.0 | 99.4 | 102.6 | 109.9 | 113.7 | 115.0 | 111.0 | 110.4 | 150.8 |
| 500 | 107.9 | 106.6 | 105.6 | 101.2 | 103.3 | 100.9 | 101.2 | 103.6 | 110.4 | 113.5 | 115.4 | 111.7 | 110.8 | 151.1 |
| 630 | 105.6 | 104.8 | 105.6 | 104.9 | 105.2 | 104.6 | 103.1 | 104.8 | 110.6 | 113.8 | 114.8 | 110.7 | 110.7 | 151.1 |
| 800 | 106.0 | 106.0 | 106.5 | 105.4 | 104.4 | 104.7 | 104.3 | 105.8 | 110.7 | 114.2 | 114.2 | 109.2 | 109.2 | 151.2 |
| 1000 | 106.6 | 104.4 | 105.6 | 104.5 | 104.7 | 105.5 | 105.4 | 106.7 | 111.2 | 113.8 | 112.1 | 108.6 | 108.2 | 150.9 |
| 1250 | 106.4 | 105.4 | 105.3 | 104.6 | 104.3 | 106.2 | 105.4 | 107.2 | 111.4 | 112.9 | 111.6 | 107.4 | 107.1 | 150.9 |
| 1600 | 105.2 | 105.0 | 105.4 | 104.4 | 105.0 | 105.7 | 105.5 | 107.0 | 110.9 | 112.4 | 110.0 | 106.5 | 107.6 | 150.8 |
| 2000 | 105.5 | 104.8 | 105.1 | 104.2 | 105.3 | 105.2 | 105.1 | 107.5 | 109.5 | 110.6 | 108.8 | 106.1 | 107.1 | 150.6 |
| 2500 | 104.2 | 104.5 | 105.1 | 103.9 | 104.7 | 105.3 | 104.4 | 105.4 | 108.8 | 110.8 | 107.5 | 105.9 | 108.2 | 150.8 |
| 3150 | 102.0 | 102.7 | 103.3 | 102.6 | 104.7 | 105.2 | 103.6 | 104.9 | 107.8 | 108.2 | 105.7 | 104.8 | 107.2 | 151.0 |
| 4000 | 100.5 | 101.6 | 103.1 | 102.6 | 104.7 | 104.3 | 101.8 | 102.4 | 105.5 | 105.9 | 103.1 | 102.0 | 106.3 | 151.4 |
| 5000 | 98.1 | 100.8 | 100.7 | 101.2 | 102.8 | 102.2 | 99.5 | 98.7 | 102.7 | 102.7 | 100.8 | 97.6 | 101.4 | 151.1 |
| 6300 | 96.6 | 96.6 | 98.0 | 96.7 | 97.2 | 96.4 | 95.6 | 94.5 | 99.6 | 99.0 | 96.9 | 94.2 | 99.1 | 150.3 |
| 8000 | 90.8 | 90.3 | 93.5 | 93.7 | 95.6 | 94.5 | 90.5 | 90.4 | 94.9 | 92.6 | 91.6 | 89.1 | 93.7 | 150.1 |
| 10000 | 88.9 | 87.0 | 89.1 | 88.6 | 88.0 | 87.4 | 83.6 | 83.6 | 90.7 | 86.6 | 85.0 | 84.4 | 87.7 | 149.1 |
| 12500 | 80.4 | 79.0 | 81.1 | 81.9 | 79.6 | 78.7 | 79.8 | 77.3 | 85.1 | 81.8 | 80.5 | 75.7 | 80.8 | 147.6 |
| 16000 | 70.8 | 69.4 | 71.5 | 73.0 | 72.0 | 72.9 | 71.6 | 70.6 | 75.3 | 72.0 | 70.7 | 65.8 | 71.0 | 145.6 |

GASPL 117.5 115.9 116.0 114.8 115.7 115.9 115.0 116.6 121.5 124.7 126.2 124.3 122.7 164.0

MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALG. 1.000 FREE JET VELOCITY (FT/SEC) 387.00 REFRACTION CORRECTION - YES
FREE JET DIAMETER (IN) 48.00 TURBULANCE CORRECTION - YES

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAPB 38.00
LOCATION C41 ANECH CH AERO. RDG. ADH117 PAMB 28.3300 RELHUM 64.60

MODEL TEST POINT 7614 ACOUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CH (23.99 SQ IN) - MODEL 117.96 M/SEC (387.0 FPS) FREE-JET SPEED

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FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X76141

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 69.6 | 71.7 | 72.1 | 71.7 | 72.9 | 73.7 | 73.4 | 74.3 | 80.8 | 89.0 | 92.4 | 91.2 | 84.2 | 166.3 |
| 63 | 71.1 | 72.0 | 73.3 | 72.3 | 76.1 | 74.6 | 75.1 | 76.5 | 82.8 | 90.0 | 93.1 | 90.8 | 83.4 | 166.6 |
| 80 | 72.5 | 73.3 | 75.0 | 73.6 | 84.8 | 78.8 | 78.3 | 78.2 | 85.4 | 90.7 | 94.0 | 91.2 | 84.1 | 167.6 |
| 100 | 75.9 | 76.3 | 77.8 | 75.8 | 76.6 | 77.3 | 77.4 | 79.5 | 87.0 | 90.8 | 93.6 | 89.3 | 83.7 | 167.1 |
| 125 | 75.3 | 74.3 | 76.6 | 76.4 | 77.7 | 78.7 | 79.2 | 80.8 | 87.1 | 90.4 | 93.1 | 88.1 | 81.2 | 166.6 |
| 160 | 76.3 | 75.6 | 78.3 | 77.4 | 78.9 | 79.6 | 79.7 | 81.7 | 88.5 | 91.0 | 92.4 | 86.1 | 81.1 | 166.5 |
| 200 | 76.1 | 78.5 | 79.8 | 78.8 | 80.0 | 80.8 | 81.1 | 82.6 | 89.3 | 92.4 | 91.8 | 84.8 | 80.3 | 167.0 |
| 250 | 89.3 | 85.1 | 82.7 | 80.7 | 79.5 | 80.4 | 80.7 | 83.4 | 88.9 | 92.6 | 92.2 | 85.7 | 81.0 | 168.5 |
| 315 | 84.7 | 85.1 | 85.4 | 81.7 | 84.3 | 82.1 | 82.2 | 84.2 | 90.2 | 92.1 | 92.1 | 85.8 | 80.6 | 168.7 |
| 400 | 81.9 | 82.9 | 85.0 | 85.2 | 85.9 | 85.5 | 83.9 | 85.1 | 90.1 | 92.0 | 91.0 | 84.1 | 78.5 | 168.8 |
| 500 | 81.8 | 83.8 | 85.6 | 85.4 | 84.9 | 85.3 | 84.7 | 85.7 | 89.8 | 92.0 | 90.0 | 82.0 | 77.1 | 168.9 |
| 630 | 81.8 | 81.8 | 84.3 | 84.2 | 84.9 | 85.9 | 85.8 | 86.4 | 89.9 | 91.1 | 87.4 | 80.8 | 75.0 | 168.6 |
| 800 | 81.2 | 82.4 | 83.8 | 84.0 | 84.3 | 86.3 | 85.3 | 86.6 | 89.9 | 89.9 | 86.4 | 78.8 | 72.8 | 168.6 |
| 1000 | 79.6 | 81.6 | 83.6 | 83.7 | 84.8 | 85.7 | 85.3 | 86.2 | 89.1 | 89.1 | 84.4 | 77.3 | 72.1 | 168.4 |
| 1250 | 79.3 | 81.1 | 83.1 | 83.3 | 85.0 | 86.1 | 84.7 | 86.5 | 87.5 | 87.0 | 82.6 | 76.1 | 70.2 | 168.3 |
| 1600 | 77.1 | 80.2 | 82.6 | 82.6 | 84.1 | 84.9 | 83.8 | 84.1 | 86.3 | 86.6 | 80.4 | 74.5 | 68.9 | 168.6 |
| 2000 | 74.0 | 77.8 | 80.5 | 81.1 | 84.0 | 84.7 | 82.8 | 83.4 | 85.0 | 83.4 | 77.7 | 71.8 | 64.9 | 168.6 |
| 2500 | 70.7 | 75.5 | 79.4 | 80.4 | 83.4 | 83.2 | 80.4 | 80.2 | 82.9 | 79.9 | 73.3 | 66.2 | 59.1 | 169.0 |
| 3150 | 64.9 | 72.3 | 75.2 | 77.5 | 80.1 | 79.8 | 76.7 | 75.0 | 77.1 | 74.2 | 67.6 | 56.7 | 45.8 | 168.8 |
| 4000 | 57.2 | 63.4 | 68.7 | 69.7 | 71.5 | 71.2 | 69.9 | 67.5 | 70.2 | 65.8 | 57.6 | 44.5 | 29.0 | 167.9 |
| 5000 | 41.6 | 49.5 | 57.9 | 61.3 | 64.9 | 64.4 | 59.9 | 58.0 | 59.3 | 51.8 | 42.5 | 25.6 | 1.7 | 167.8 |
| 6300 | 22.0 | 32.0 | 41.4 | 45.4 | 47.2 | 47.4 | 44.6 | 40.4 | 43.0 | 31.6 | 18.1 | | 166.8 | |
| 8000 | | | 12.1 | 19.4 | 20.6 | 20.9 | 20.9 | 14.8 | 16.1 | 2.0 | | | 165.2 | |
| 10000 | | | | | | | | | | | | | 163.2 | |

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| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| GASPL | 93.4 | 93.3 | 94.7 | 94.2 | 95.7 | 95.9 | 95.1 | 96.3 | 100.6 | 102.8 | 103.2 | 98.8 | 92.6 | 181.6 |
| PWL | 99.8 | 100.6 | 103.0 | 103.4 | 105.6 | 105.7 | 104.0 | 104.7 | 107.9 | 108.5 | 106.8 | 100.5 | 94.7 | |
| PWLT | 101.3 | 100.6 | 103.8 | 104.0 | 106.9 | 106.8 | 104.0 | 104.7 | 108.5 | 109.0 | 107.8 | 100.5 | 95.9 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

| | | | | | | | |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | SB59 | TAMB | 38.00 |
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH117 | PAMB | 29.3300 | RELHUM | 54.60 |

| | | | | |
|-------|------------|-------------------------|-------------------------------------|---------------------------|
| MODEL | TEST POINT | ACOUSTIC RANGE | SIZE | FREE-JET SPEED |
| 7600 | 7614 | 731.5 M (2400.0 FT) SL | 9032.2 SQ CM (1400.00 SQ IN) - FULL | 117.96 M/SEC (387.0 FPS) |

08/30/79 19.452

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 58 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X76150
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160.

FREQ

50

83

80

100

125

160

200

250 87.5 92.3 91.3 92.1 92.2 94.3 97.0 98.9 104.1 109.4 113.3 116.5 116.4 149.8
315 88.9 91.4 91.4 92.0 94.1 96.2 96.8 99.2 105.2 111.5 115.1 118.3 117.0 151.4
400 90.4 92.7 93.5 92.7 94.1 96.2 97.3 99.5 107.5 115.5 117.7 118.6 116.5 153.0
500 91.5 93.8 94.8 94.3 95.4 97.5 98.7 100.3 108.5 116.1 119.2 120.4 117.3 154.2
630 92.6 94.9 95.2 95.4 96.8 98.6 100.3 103.2 110.7 116.5 119.6 120.8 116.2 154.8
800 97.4 96.2 96.7 97.2 97.6 99.9 101.3 104.7 112.2 116.8 120.1 121.3 118.0 155.4
1000 100.7 101.5 100.8 99.6 98.9 101.5 102.7 105.6 113.0 115.9 120.0 121.7 118.8 155.4
1250 97.6 101.4 101.7 101.2 101.6 103.1 103.5 106.9 113.6 115.5 121.1 122.3 117.9 156.0
1600 99.9 99.3 99.1 100.1 100.9 103.0 104.4 107.8 114.7 116.2 120.9 120.3 116.3 155.4
2000 101.1 102.7 100.7 100.0 101.5 101.9 103.8 108.0 114.8 117.0 120.0 118.2 113.2 154.7
2500 102.1 103.1 102.1 101.9 101.7 102.8 105.2 108.6 114.8 118.0 119.9 117.1 111.3 154.8
3150 102.3 103.9 103.2 102.9 102.5 103.6 105.2 108.9 115.3 116.3 118.2 115.9 110.6 153.9
4000 100.7 102.3 102.5 102.8 103.1 103.9 105.3 109.0 114.4 116.2 116.6 114.0 108.5 153.0
5000 100.0 101.9 101.9 101.9 103.7 104.8 106.2 109.1 114.3 116.1 115.4 112.5 108.1 152.8
6300 96.0 101.6 102.2 101.9 103.4 105.7 106.2 108.9 113.3 115.3 114.8 110.9 107.1 152.3
8000 97.9 101.3 101.4 102.3 103.1 104.5 105.8 108.4 113.0 113.2 113.5 109.6 106.2 151.6
10000 95.8 100.9 101.5 102.1 103.7 105.7 105.0 107.8 111.7 112.7 111.4 108.9 104.8 151.3
12500 93.3 99.9 99.6 101.0 102.8 104.4 104.1 106.7 109.1 110.1 109.1 106.6 103.1 150.1
16000 91.8 97.3 99.1 100.0 102.9 104.7 102.6 105.2 107.4 108.6 107.0 104.5 102.3 150.1
20000 88.8 94.6 95.7 97.5 101.3 103.2 100.3 101.9 104.0 105.0 103.7 102.2 99.7 149.0
25000 85.6 90.7 93.0 94.1 96.7 99.6 97.1 97.6 101.2 100.5 99.9 98.1 98.2 147.9
31500 83.9 87.7 91.0 92.8 93.6 93.7 93.6 94.1 96.3 99.3 95.9 91.6 90.7 147.2
40000 79.1 82.4 85.2 87.1 91.4 91.9 88.4 89.4 92.2 94.6 92.0 86.4 86.9 147.1
50000 71.7 75.0 77.7 80.7 82.9 84.7 83.6 82.8 88.0 88.5 85.8 81.6 80.5 145.4
63000 68.7 69.8 71.9 74.3 75.4 77.1 78.1 77.0 83.6 82.8 80.1 76.8 74.9 145.1
80000 62.4 63.4 66.7 69.4 69.1 74.0 72.0 73.5 77.8 76.8 75.3 69.5 68.0 146.6

GASPL 111.1 113.1 113.2 114.4 116.0 116.6 118.6 125.4 128.1 130.7 130.8 127.7 166.7

ORIGINAL PAGE 15
OF POOR QUALITY

TEST DATE 02-21-78 TAPE NO. N294 ALPHA 5859 TAMB 24.80
LOCATION C41 ANECH CH AERO. RDG. ADH095 PAMB 29.3550 RELHUM 38.00

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
7600 12.2 M (40.0 FT) ARC 154.7 SQ CH (23.99 SQ IN) - MODEL 0. M/SEC (0. FPS)

715

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL. X76150

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PHL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

GASPL

111.1

113.1

113.2

114.4

116.0

118.6

119.6

125.4

128.1

130.7

130.8

127.7

166.7

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 FREE JET VELOCITY (FT/SEC) FREE JET DIAMETER (IN) 0. 48.00 REFRACTION CORRECTION - YES TURBULANCE CORRECTION - YES

TEST DATE 02-21-78 LOCATION C41 ANECH CH TAPE NO. N294 AERO. RDG. ADH035 ALPHA 3859 TAMB 24.80 PAMB 29.3550 RELHUM 39.00

MODEL TEST POINT 7615 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CH (23.99 SQ IN) - MODEL 0. FREE-JET SPEED M/SEC (0. FPS)

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
 59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X76151

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PNL |
|-------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|
| 50 | 68.6 | 72.4 | 74.3 | 74.3 | 76.0 | 76.3 | 79.3 | 81.0 | 88.3 | 95.3 | 95.9 | 94.9 | 89.2 | 170.6 |
| 63 | 69.7 | 73.5 | 75.2 | 75.9 | 77.4 | 79.6 | 80.9 | 81.9 | 89.3 | 95.8 | 97.4 | 96.4 | 90.0 | 171.9 |
| 80 | 70.7 | 74.6 | 75.9 | 76.9 | 80.7 | 80.7 | 82.2 | 84.7 | 91.4 | 96.2 | 97.7 | 96.7 | 90.7 | 172.4 |
| 100 | 75.4 | 75.8 | 77.4 | 78.7 | 79.7 | 81.9 | 83.2 | 86.2 | 92.9 | 96.4 | 98.2 | 97.1 | 91.3 | 173.0 |
| 125 | 78.7 | 81.0 | 81.4 | 80.9 | 80.7 | 83.4 | 84.4 | 86.8 | 93.7 | 95.4 | 97.9 | 97.3 | 91.0 | 173.1 |
| 160 | 75.3 | 80.8 | 82.2 | 82.4 | 83.4 | 84.9 | 85.2 | 88.2 | 94.1 | 94.9 | 98.9 | 97.7 | 89.7 | 173.6 |
| 200 | 77.4 | 79.5 | 79.4 | 81.2 | 82.4 | 84.7 | 85.9 | 88.7 | 95.0 | 95.3 | 98.4 | 95.4 | 87.6 | 173.1 |
| 250 | 78.3 | 81.6 | 80.8 | 80.8 | 81.8 | 83.3 | 85.1 | 88.8 | 94.9 | 95.9 | 97.2 | 92.8 | 83.8 | 172.4 |
| 315 | 78.8 | 81.7 | 81.9 | 82.5 | 82.7 | 84.0 | 86.2 | 89.2 | 94.5 | 96.5 | 96.7 | 91.2 | 81.2 | 172.4 |
| 400 | 78.6 | 82.0 | 82.6 | 83.2 | 83.2 | 84.5 | 86.0 | 89.2 | 94.7 | 94.5 | 94.5 | 89.3 | 79.5 | 171.6 |
| 500 | 78.5 | 80.0 | 81.6 | 82.7 | 83.5 | 84.6 | 85.8 | 89.0 | 93.5 | 93.9 | 92.3 | 86.8 | 73.3 | 170.7 |
| 630 | 75.3 | 79.2 | 80.7 | 81.5 | 83.9 | 85.1 | 86.4 | 88.8 | 93.1 | 93.4 | 90.7 | 84.7 | 74.9 | 170.4 |
| 800 | 72.8 | 78.6 | 80.6 | 81.3 | 83.3 | 85.9 | 86.1 | 88.3 | 91.8 | 92.3 | 89.4 | 82.3 | 72.7 | 169.9 |
| 1000 | 72.3 | 78.0 | 79.6 | 81.5 | 82.9 | 84.4 | 85.6 | 87.6 | 91.3 | 89.9 | 87.8 | 80.4 | 70.7 | 169.3 |
| 1250 | 69.6 | 77.2 | 79.5 | 81.2 | 83.4 | 85.5 | 84.7 | 86.9 | 89.7 | 89.0 | 85.2 | 78.9 | 67.9 | 169.0 |
| 1600 | 66.3 | 74.7 | 77.2 | 79.7 | 82.1 | 84.0 | 83.5 | 85.4 | 86.7 | 86.1 | 82.1 | 75.2 | 63.8 | 167.8 |
| 2000 | 63.8 | 72.5 | 76.3 | 78.5 | 82.1 | 84.1 | 81.8 | 83.7 | 84.6 | 83.8 | 79.0 | 71.5 | 60.0 | 167.8 |
| 2500 | 57.0 | 68.6 | 72.0 | 75.4 | 80.0 | 82.1 | 79.0 | 79.7 | 80.3 | 78.9 | 73.9 | 66.3 | 52.5 | 166.7 |
| 3150 | 52.5 | 62.2 | 67.4 | 70.3 | 78.0 | 77.2 | 74.4 | 73.9 | 75.7 | 72.0 | 66.7 | 57.2 | 42.6 | 165.6 |
| 4000 | 44.5 | 54.5 | 61.6 | 65.8 | 67.9 | 68.4 | 67.9 | 67.1 | 68.9 | 66.1 | 56.5 | 41.9 | 20.6 | 164.9 |
| 5000 | 30.0 | 41.6 | 49.5 | 54.7 | 60.7 | 61.7 | 57.7 | 57.0 | 56.5 | 53.8 | 42.9 | 22.9 | | 164.8 |
| 6300 | 4.8 | 20.0 | 30.1 | 37.5 | 42.1 | 44.7 | 42.8 | 39.6 | 40.4 | 33.5 | 18.9 | | | 163.1 |
| 8000 | | | 2.9 | 11.9 | 16.5 | 19.3 | 19.2 | 14.5 | 14.6 | 3.0 | | | | 162.7 |
| 10000 | | | | | | | | | | | | | | 164.2 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |
| GASPL | 87.6 | 91.1 | 92.3 | 93.2 | 94.7 | 96.4 | 97.1 | 99.7 | 104.9 | 106.6 | 107.6 | 105.7 | 98.9 | 184.1 |
| PNL | 92.4 | 97.1 | 99.1 | 100.9 | 103.6 | 105.4 | 104.6 | 106.6 | 110.5 | 111.1 | 110.7 | 106.8 | 98.5 | |
| PNLT | 93.6 | 97.1 | 99.1 | 100.9 | 104.8 | 106.5 | 104.6 | 106.6 | 111.0 | 111.7 | 111.8 | 106.8 | 98.8 | |

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DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-21-78 TAPE NO. N294 ALPHA SB59 TAMB 24.80
 LOCATION C41 ANECH CH AERO. RDG. ADH095 PAFB 29.3550 RELHUM 39.00

MODEL TEST POINT 7615 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 0. FREE-JET SPEED 0. M/SEC (0. FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X76160
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 83.8 | 87.6 | 87.3 | 88.1 | 89.7 | 91.3 | 93.7 | 95.6 | 98.6 | 105.1 | 110.8 | 113.7 | 113.6 | 146.9 |
| 315 | 85.9 | 86.9 | 87.6 | 88.0 | 90.3 | 92.2 | 93.3 | 95.7 | 100.2 | 107.2 | 111.9 | 115.6 | 113.7 | 148.2 |
| 400 | 87.6 | 88.4 | 89.4 | 88.5 | 90.6 | 92.4 | 93.3 | 96.2 | 101.6 | 111.3 | 114.7 | 116.3 | 112.5 | 149.7 |
| 500 | 88.2 | 88.3 | 90.5 | 90.1 | 91.7 | 93.8 | 94.7 | 97.3 | 102.5 | 112.9 | 116.2 | 117.2 | 111.6 | 150.8 |
| 630 | 88.6 | 89.6 | 91.4 | 91.4 | 97.5 | 95.1 | 96.3 | 99.7 | 104.9 | 113.2 | 117.3 | 117.0 | 109.7 | 151.2 |
| 800 | 91.6 | 89.9 | 92.4 | 93.2 | 94.0 | 96.1 | 97.8 | 100.7 | 106.9 | 113.2 | 117.1 | 115.5 | 106.7 | 150.8 |
| 1000 | 93.9 | 92.2 | 94.2 | 94.0 | 94.9 | 97.2 | 98.9 | 101.8 | 108.0 | 113.1 | 115.7 | 114.6 | 104.0 | 150.0 |
| 1250 | 92.0 | 94.1 | 95.8 | 95.6 | 97.5 | 98.8 | 99.7 | 103.4 | 109.1 | 112.9 | 116.5 | 113.2 | 101.9 | 150.3 |
| 1600 | 96.1 | 92.9 | 95.0 | 95.5 | 96.8 | 99.9 | 100.8 | 103.7 | 109.7 | 113.8 | 116.3 | 111.7 | 100.7 | 150.3 |
| 2000 | 98.8 | 98.0 | 97.3 | 95.6 | 96.2 | 99.4 | 101.2 | 104.8 | 110.3 | 114.4 | 116.1 | 109.8 | 100.1 | 150.4 |
| 2500 | 100.4 | 99.9 | 101.2 | 100.2 | 98.3 | 99.4 | 102.1 | 105.2 | 110.2 | 115.3 | 116.2 | 110.2 | 101.0 | 151.0 |
| 3150 | 100.2 | 100.5 | 101.3 | 101.3 | 101.1 | 101.2 | 102.8 | 106.3 | 110.8 | 114.9 | 116.0 | 109.7 | 100.7 | 151.0 |
| 4000 | 99.1 | 98.6 | 101.4 | 101.4 | 101.0 | 102.3 | 102.7 | 106.7 | 110.2 | 114.5 | 114.7 | 107.9 | 99.6 | 150.4 |
| 5000 | 99.5 | 99.1 | 99.7 | 100.6 | 101.7 | 102.8 | 104.4 | 107.1 | 110.4 | 115.3 | 113.2 | 106.3 | 98.3 | 150.5 |
| 6300 | 99.0 | 99.4 | 100.7 | 100.4 | 100.9 | 104.0 | 103.9 | 107.4 | 110.3 | 114.6 | 111.6 | 105.1 | 97.8 | 150.1 |
| 8000 | 98.9 | 99.3 | 100.2 | 100.5 | 101.3 | 103.2 | 104.3 | 106.9 | 110.4 | 113.6 | 110.5 | 103.9 | 96.9 | 149.9 |
| 10000 | 98.3 | 99.6 | 100.5 | 100.5 | 102.1 | 104.0 | 103.8 | 107.2 | 109.0 | 112.3 | 109.5 | 103.0 | 95.8 | 149.7 |
| 12500 | 95.9 | 98.3 | 98.9 | 100.4 | 101.4 | 103.1 | 102.5 | 105.7 | 107.1 | 110.6 | 106.9 | 101.8 | 94.7 | 148.9 |
| 16000 | 94.8 | 97.0 | 98.9 | 100.1 | 102.2 | 103.4 | 101.6 | 104.8 | 106.0 | 109.1 | 104.7 | 99.8 | 94.2 | 149.2 |
| 20000 | 89.8 | 94.2 | 95.4 | 97.9 | 101.3 | 102.7 | 99.8 | 101.8 | 103.9 | 106.0 | 102.1 | 97.2 | 92.1 | 148.7 |
| 25000 | 88.8 | 90.2 | 93.0 | 93.9 | 98.2 | 99.5 | 97.1 | 97.2 | 100.8 | 101.4 | 98.3 | 93.5 | 90.3 | 147.5 |
| 31500 | 86.9 | 87.4 | 90.7 | 93.1 | 93.3 | 94.3 | 93.5 | 94.4 | 98.2 | 99.6 | 96.5 | 89.0 | 84.7 | 147.7 |
| 40000 | 82.1 | 82.0 | 85.7 | 87.5 | 91.2 | 92.1 | 88.2 | 89.8 | 92.7 | 94.0 | 90.3 | 83.5 | 80.5 | 147.0 |
| 50000 | 75.2 | 75.7 | 78.4 | 81.2 | 83.3 | 84.2 | 83.0 | 82.8 | 88.0 | 87.3 | 84.2 | 78.6 | 75.0 | 144.9 |
| 63000 | 69.7 | 69.6 | 72.2 | 74.9 | 75.1 | 75.8 | 76.8 | 76.0 | 83.4 | 81.2 | 78.5 | 72.4 | 68.9 | 144.1 |
| 80000 | 63.3 | 63.3 | 66.5 | 70.0 | 68.6 | 70.7 | 69.3 | 70.4 | 77.7 | 76.1 | 74.1 | 64.0 | 60.6 | 145.4 |
| ASPL | 109.5 | 109.8 | 111.0 | 111.3 | 112.4 | 114.0 | 114.3 | 117.4 | 121.3 | 126.0 | 127.4 | 125.5 | 120.2 | 163.6 |

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TEST DATE 02-27-78 TAPE NO. N299 IALPHA SB59 TANB 37.00
LOCATION C41 ANECH CH AERO. RDG. ADH119 PAMB 29.3300 RELHUM 54.90

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
7600 7616 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 90.83 M/SEC (298.0 FPS)

718

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X76160

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 89.4 | 92.1 | 90.8 | 90.5 | 89.9 | 91.3 | 92.3 | 92.8 | 97.5 | 103.6 | 108.0 | 112.0 | 111.5 | 145.0 |
| 315 | 89.4 | 92.1 | 90.8 | 90.4 | 91.6 | 92.3 | 92.2 | 93.6 | 99.7 | 108.9 | 112.0 | 114.2 | 112.2 | 147.6 |
| 400 | 91.5 | 91.6 | 91.3 | 90.8 | 91.8 | 92.6 | 92.7 | 94.8 | 101.2 | 111.1 | 114.4 | 116.3 | 113.3 | 149.7 |
| 500 | 92.5 | 92.6 | 92.7 | 92.6 | 93.0 | 94.0 | 94.1 | 96.0 | 103.7 | 111.8 | 116.1 | 117.3 | 113.3 | 150.7 |
| 630 | 93.8 | 92.9 | 94.1 | 94.0 | 98.9 | 95.3 | 95.6 | 98.3 | 105.6 | 112.0 | 116.2 | 116.7 | 112.4 | 150.7 |
| 800 | 94.4 | 94.3 | 95.0 | 95.8 | 95.5 | 96.4 | 97.1 | 99.2 | 107.2 | 112.2 | 115.3 | 116.8 | 111.6 | 150.5 |
| 1000 | 97.1 | 94.5 | 96.1 | 96.3 | 96.2 | 97.6 | 98.3 | 100.3 | 108.1 | 111.7 | 115.6 | 115.0 | 109.3 | 150.1 |
| 1250 | 98.4 | 96.1 | 97.4 | 98.3 | 99.0 | 99.3 | 99.1 | 101.6 | 108.7 | 112.5 | 115.4 | 113.4 | 108.0 | 149.9 |
| 1600 | 97.6 | 98.6 | 99.6 | 98.1 | 98.5 | 100.5 | 100.3 | 102.2 | 109.3 | 113.1 | 111.2 | 106.9 | 149.7 | |
| 2000 | 101.2 | 97.4 | 98.6 | 97.7 | 97.5 | 99.7 | 100.7 | 103.4 | 109.5 | 114.2 | 115.5 | 111.9 | 108.1 | 150.4 |
| 2500 | 103.2 | 101.7 | 100.2 | 102.4 | 99.8 | 100.3 | 101.6 | 104.0 | 110.3 | 114.1 | 115.6 | 111.7 | 109.1 | 150.7 |
| 3150 | 104.7 | 103.5 | 104.1 | 103.7 | 102.9 | 102.3 | 102.6 | 105.3 | 110.0 | 114.1 | 114.5 | 110.0 | 107.0 | 150.6 |
| 4000 | 104.0 | 103.9 | 104.2 | 104.6 | 103.3 | 103.8 | 103.0 | 106.0 | 110.8 | 115.4 | 113.5 | 109.0 | 106.2 | 151.0 |
| 5000 | 104.1 | 103.1 | 105.2 | 104.1 | 104.3 | 104.6 | 105.1 | 106.8 | 111.2 | 115.3 | 112.6 | 108.5 | 106.3 | 151.2 |
| 6300 | 104.9 | 103.9 | 103.7 | 104.1 | 103.9 | 106.2 | 105.1 | 107.6 | 111.9 | 114.7 | 111.8 | 107.4 | 105.6 | 151.3 |
| 8000 | 104.2 | 104.1 | 104.7 | 104.8 | 106.1 | 106.1 | 106.1 | 107.6 | 110.8 | 113.6 | 111.0 | 106.7 | 104.7 | 151.1 |
| 10000 | 103.9 | 104.0 | 104.4 | 104.7 | 105.7 | 107.0 | 105.6 | 108.0 | 109.1 | 112.3 | 108.7 | 105.8 | 103.9 | 150.9 |
| 12500 | 103.1 | 104.0 | 104.4 | 104.7 | 105.0 | 106.1 | 104.5 | 106.5 | 108.6 | 111.3 | 107.1 | 104.4 | 103.9 | 150.9 |
| 16000 | 100.2 | 102.2 | 102.4 | 105.1 | 106.2 | 106.4 | 103.7 | 105.8 | 107.1 | 108.8 | 105.0 | 102.3 | 102.3 | 151.1 |
| 20000 | 100.6 | 102.2 | 103.1 | 103.0 | 105.4 | 105.7 | 101.9 | 102.8 | 105.4 | 105.7 | 103.1 | 101.0 | 103.6 | 151.4 |
| 25000 | 95.0 | 98.7 | 99.1 | 99.0 | 102.2 | 102.5 | 99.6 | 98.9 | 102.7 | 103.6 | 100.7 | 95.4 | 96.3 | 150.5 |
| 31500 | 93.2 | 94.0 | 95.9 | 98.2 | 97.3 | 97.3 | 95.6 | 95.3 | 98.2 | 99.0 | 95.5 | 91.0 | 93.0 | 149.6 |
| 40000 | 90.5 | 90.3 | 92.7 | 92.6 | 95.2 | 95.1 | 90.3 | 90.9 | 93.8 | 92.7 | 89.7 | 86.4 | 87.9 | 149.6 |
| 50000 | 85.3 | 84.5 | 87.4 | 86.2 | 87.3 | 87.2 | 85.1 | 83.9 | 90.1 | 87.4 | 84.9 | 81.1 | 82.7 | 147.9 |
| 63000 | 77.5 | 77.3 | 79.1 | 79.1 | 78.7 | 78.6 | 78.9 | 77.0 | 85.9 | 83.8 | 82.0 | 74.1 | 75.8 | 147.3 |
| 80000 | 68.5 | 68.0 | 70.2 | 75.1 | 72.6 | 73.7 | 71.4 | 71.3 | 76.1 | 74.0 | 72.2 | 64.3 | 66.0 | 146.2 |
| QASPL | 114.4 | 114.1 | 114.7 | 115.0 | 115.4 | 116.1 | 115.2 | 117.2 | 121.6 | 125.6 | 126.6 | 125.7 | 122.2 | 164.2 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 298.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | SB59 | TAMB | 37.00 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH119 | PAMB | 29.3300 | RELHUM | 54.90 |

| MODEL | TEST POINT | ACOUSTIC RANGE | 12.2 M (40.0 FT) | ARC | 154.7 SQ CM (23.99 SQ IN) | MODEL | FREE-JET SPEED |
|-------|------------|----------------|-------------------|-----|----------------------------|-------|--------------------------|
| 7600 | 7616 | | | | | | 90.83 M/SEC (298.0 FPS) |

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FM/JL X76161

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 69.7 | 71.3 | 72.1 | 72.3 | 73.8 | 74.7 | 74.6 | 76.3 | 82.0 | 90.9 | 92.7 | 92.4 | 86.0 | 167.3 |
| 63 | 70.7 | 72.4 | 73.5 | 74.1 | 74.9 | 76.0 | 76.0 | 77.5 | 84.5 | 91.5 | 94.3 | 93.2 | 85.9 | 168.4 |
| 80 | 71.9 | 72.6 | 74.9 | 75.5 | 80.8 | 77.4 | 77.5 | 79.8 | 86.6 | 91.6 | 94.3 | 92.6 | 84.9 | 168.3 |
| 100 | 72.5 | 73.9 | 75.8 | 77.2 | 77.3 | 78.4 | 79.0 | 80.6 | 87.9 | 91.8 | 93.4 | 92.6 | 84.0 | 168.1 |
| 125 | 75.1 | 74.1 | 76.7 | 77.7 | 78.0 | 79.5 | 80.0 | 81.7 | 88.7 | 91.2 | 93.8 | 90.7 | 81.4 | 167.7 |
| 160 | 76.1 | 75.5 | 77.9 | 79.5 | 80.7 | 81.1 | 80.8 | 83.0 | 89.2 | 91.9 | 93.1 | 88.8 | 79.7 | 167.5 |
| 200 | 75.1 | 77.9 | 79.9 | 79.2 | 80.0 | 82.2 | 81.8 | 83.3 | 89.5 | 92.2 | 92.6 | 86.3 | 78.2 | 167.4 |
| 250 | 78.4 | 76.3 | 78.6 | 78.5 | 78.8 | 81.2 | 82.0 | 84.2 | 89.5 | 93.1 | 92.7 | 86.5 | 78.7 | 168.0 |
| 315 | 80.0 | 80.3 | 79.9 | 83.0 | 80.9 | 81.5 | 82.9 | 84.5 | 90.1 | 92.7 | 92.4 | 85.8 | 78.0 | 168.4 |
| 400 | 81.0 | 81.7 | 83.5 | 84.0 | 83.6 | 83.2 | 83.3 | 85.5 | 89.5 | 92.3 | 90.8 | 83.5 | 78.8 | 168.3 |
| 500 | 79.7 | 81.6 | 83.3 | 84.5 | 83.7 | 84.4 | 83.5 | 85.9 | 89.9 | 93.1 | 89.3 | 81.8 | 74.1 | 168.7 |
| 630 | 79.4 | 80.5 | 84.0 | 83.8 | 84.5 | 84.9 | 85.3 | 86.5 | 90.0 | 92.6 | 87.9 | 80.6 | 73.1 | 168.8 |
| 800 | 79.7 | 80.9 | 82.2 | 83.5 | 83.6 | 86.3 | 85.0 | 87.0 | 90.4 | 91.7 | 86.6 | 78.8 | 71.2 | 168.9 |
| 1000 | 78.5 | 80.8 | 83.0 | 83.9 | 84.6 | 86.0 | 85.9 | 86.9 | 89.0 | 90.3 | 86.4 | 77.5 | 69.2 | 168.8 |
| 1250 | 77.8 | 80.4 | 82.4 | 83.8 | 85.3 | 86.8 | 85.2 | 87.1 | 87.1 | 88.6 | 82.5 | 75.7 | 66.9 | 168.6 |
| 1600 | 76.1 | 79.7 | 82.0 | 83.4 | 84.4 | 85.6 | 83.9 | 85.3 | 86.2 | 87.1 | 80.1 | 73.0 | 64.7 | 168.6 |
| 2000 | 72.2 | 77.3 | 79.6 | 83.6 | 85.4 | 85.9 | 82.9 | 84.3 | 84.2 | 83.9 | 77.0 | 69.2 | 60.0 | 168.8 |
| 2500 | 70.8 | 76.1 | 79.5 | 80.8 | 84.0 | 84.6 | 80.6 | 80.6 | 81.7 | 79.6 | 73.3 | 65.1 | 55.4 | 169.1 |
| 3150 | 61.8 | 70.2 | 73.5 | 75.2 | 79.5 | 80.1 | 76.9 | 75.1 | 77.1 | 75.1 | 67.6 | 54.6 | 40.7 | 168.2 |
| 4000 | 53.8 | 60.7 | 66.5 | 71.2 | 71.5 | 72.0 | 69.9 | 68.3 | 68.8 | 65.8 | 56.1 | 41.3 | 22.9 | 167.3 |
| 5000 | 41.4 | 49.5 | 57.1 | 60.1 | 64.5 | 65.0 | 59.6 | 58.5 | 58.2 | 51.9 | 40.6 | 22.9 | | 167.2 |
| 6300 | 18.3 | 29.5 | 39.7 | 43.0 | 46.5 | 47.2 | 44.3 | 40.6 | 42.4 | 32.4 | 18.0 | | | 165.6 |
| 8000 | | | 10.1 | 16.6 | 19.8 | 21.0 | 20.0 | 14.6 | 16.9 | 4.0 | | | | 164.9 |
| 10000 | | | | | | | | | | | | | | 163.8 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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OASPL 89.7 91.1 93.2 94.4 95.2 96.1 95.3 96.9 100.8 103.8 103.6 100.5 92.8 181.7
 PNLT 96.4 99.4 102.2 104.0 105.7 106.4 104.2 105.5 107.7 109.3 107.0 101.2 92.8
 PNLT 97.5 99.4 102.9 104.5 106.9 107.6 104.2 105.5 108.2 109.3 107.0 101.2 94.1

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 ALPHA SB59 TAMB 37.00
 LOCATION C41 ANECH.CH AERG. RDG. ADH119 PAMB 29.3300 RELHUM 54.90

MODEL TEST POINT 7616 ACUSTIC RANGE 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL SIZE 90.83 M/SEC (298.0 FPS) FREE-JET SPEED

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, 88 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X76170
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

60

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

10000000

12500000

16000000

20000000

25000000

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TEST DATE 02-27-78 TAPE NO. N299 ALPHA 8859 TAMB 37.00
LOCATION C41 ANECH CH AERG. RDG. ADH120 PAMB 29.3300 RELHUM 54.80

MODEL TEST POINT 7617 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 117.96 M/SEC (387.0 FPS) FREE-JET SPEED

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS

59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X76170

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 90.7 | 92.2 | 90.8 | 90.9 | 89.9 | 90.0 | 90.5 | 91.1 | 95.8 | 102.5 | 106.1 | 110.5 | 110.2 | 143.5 |
| 315 | 90.7 | 92.2 | 90.8 | 90.9 | 90.7 | 91.3 | 90.4 | 91.7 | 98.6 | 107.6 | 111.6 | 113.6 | 110.9 | 146.9 |
| 400 | 92.2 | 92.2 | 91.8 | 90.4 | 91.2 | 91.9 | 91.7 | 93.4 | 100.1 | 109.5 | 113.5 | 114.6 | 110.7 | 148.2 |
| 500 | 93.1 | 92.9 | 92.3 | 91.1 | 93.5 | 93.0 | 93.1 | 94.3 | 102.3 | 110.3 | 114.5 | 114.2 | 109.7 | 148.5 |
| 630 | 94.1 | 93.1 | 94.5 | 92.6 | 100.4 | 94.5 | 94.1 | 96.9 | 104.4 | 111.0 | 115.1 | 113.7 | 109.9 | 149.0 |
| 800 | 97.6 | 96.7 | 97.1 | 94.6 | 95.0 | 96.4 | 95.9 | 98.2 | 106.4 | 111.3 | 114.1 | 112.4 | 110.3 | 148.6 |
| 1000 | 97.5 | 94.7 | 95.9 | 95.3 | 95.9 | 97.1 | 97.4 | 99.4 | 107.1 | 111.3 | 113.8 | 110.0 | 107.7 | 148.1 |
| 1250 | 98.5 | 96.4 | 98.1 | 96.0 | 97.6 | 98.6 | 98.3 | 100.7 | 108.4 | 111.8 | 112.8 | 108.5 | 107.2 | 148.0 |
| 1600 | 98.4 | 98.6 | 99.6 | 97.7 | 98.2 | 99.7 | 99.3 | 101.5 | 108.9 | 112.4 | 112.6 | 107.5 | 107.6 | 148.3 |
| 2000 | 101.6 | 98.3 | 98.6 | 98.1 | 97.2 | 99.0 | 100.2 | 102.5 | 109.2 | 113.2 | 113.2 | 108.8 | 108.3 | 149.0 |
| 2500 | 104.8 | 103.5 | 100.9 | 98.0 | 100.1 | 100.4 | 101.6 | 103.3 | 110.8 | 113.4 | 113.6 | 109.8 | 109.0 | 149.9 |
| 3150 | 103.2 | 103.9 | 104.3 | 102.7 | 103.5 | 102.8 | 102.6 | 105.0 | 110.5 | 113.9 | 113.5 | 109.7 | 108.5 | 150.4 |
| 4000 | 104.6 | 104.7 | 105.3 | 104.0 | 104.2 | 104.0 | 103.5 | 105.7 | 111.2 | 114.9 | 113.1 | 110.0 | 108.3 | 151.0 |
| 5000 | 105.6 | 104.3 | 105.9 | 105.6 | 105.2 | 105.6 | 105.2 | 106.7 | 111.6 | 114.2 | 111.6 | 108.0 | 108.5 | 151.1 |
| 6300 | 106.0 | 106.1 | 105.8 | 104.6 | 105.1 | 106.5 | 105.9 | 107.2 | 111.5 | 113.2 | 111.0 | 107.3 | 108.3 | 151.0 |
| 8000 | 105.2 | 104.7 | 105.9 | 104.4 | 105.6 | 106.2 | 105.7 | 107.0 | 110.8 | 113.0 | 109.3 | 106.7 | 106.5 | 150.9 |
| 10000 | 105.0 | 105.5 | 105.1 | 104.9 | 106.1 | 107.5 | 105.5 | 107.4 | 110.0 | 111.6 | 108.0 | 106.1 | 107.3 | 151.1 |
| 12500 | 104.4 | 105.0 | 105.1 | 104.4 | 105.9 | 106.0 | 105.0 | 106.2 | 109.5 | 111.4 | 107.2 | 105.4 | 107.0 | 151.3 |
| 16000 | 102.0 | 103.1 | 103.0 | 103.8 | 107.2 | 106.4 | 104.1 | 105.4 | 108.1 | 109.2 | 105.2 | 104.9 | 106.8 | 151.7 |
| 20000 | 102.6 | 103.7 | 104.9 | 104.4 | 106.4 | 105.9 | 102.9 | 103.2 | 106.9 | 106.5 | 103.1 | 102.7 | 106.6 | 152.5 |
| 25000 | 97.5 | 100.7 | 100.9 | 101.3 | 102.9 | 102.5 | 100.1 | 99.3 | 103.4 | 103.6 | 100.1 | 97.7 | 101.2 | 151.4 |
| 31500 | 95.5 | 95.7 | 97.6 | 96.8 | 97.3 | 97.0 | 96.2 | 95.5 | 99.7 | 99.7 | 96.5 | 94.4 | 98.8 | 150.4 |
| 40000 | 90.4 | 89.4 | 92.3 | 93.8 | 95.7 | 95.3 | 91.1 | 90.8 | 94.9 | 93.8 | 90.5 | 89.1 | 93.2 | 150.2 |
| 50000 | 87.5 | 86.0 | 89.7 | 89.2 | 87.8 | 87.7 | 86.1 | 84.5 | 90.5 | 87.6 | 85.0 | 83.6 | 87.5 | 149.1 |
| 63000 | 80.0 | 78.6 | 80.4 | 81.2 | 79.1 | 78.8 | 79.8 | 77.4 | 84.9 | 82.0 | 80.1 | 74.3 | 78.4 | 147.3 |
| 80000 | 70.1 | 69.0 | 70.5 | 72.5 | 72.1 | 73.2 | 71.8 | 71.0 | 75.1 | 72.2 | 70.2 | 64.5 | 68.6 | 145.4 |
| GASPL | 115.5 | 115.2 | 115.6 | 114.8 | 116.1 | 116.3 | 115.3 | 116.8 | 121.8 | 124.9 | 125.2 | 123.4 | 121.8 | 163.9 |

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| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 387.00 | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|--------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | SB59 | YAMB | 37.00 |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH120 | PAMB | 29.3300 | RELNUM | 54.80 |

| MODEL | TEST POINT | ACQUSTIC RANGE | 12.2 M (40.0 FT) | ARC | 154.7 SQ CM (23.99 SQ IN) | MODEL | 117.96 M/SEC (387.0 FPS) |
|-------|------------|----------------|-------------------|-----|----------------------------|-------|---------------------------|
| 7600 | 7617 | | | | | | |

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X76171

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PHL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 70.4 | 72.0 | 72.7 | 71.9 | 73.2 | 74.0 | 73.7 | 75.0 | 80.9 | 89.3 | 91.7 | 90.6 | 83.4 | 165.8 |
| 63 | 71.3 | 72.6 | 73.1 | 72.6 | 75.4 | 75.1 | 75.0 | 75.8 | 83.1 | 90.0 | 92.7 | 90.2 | 82.3 | 166.2 |
| 80 | 72.2 | 72.8 | 75.3 | 74.1 | 82.3 | 76.5 | 76.0 | 78.4 | 85.2 | 90.6 | 93.2 | 89.7 | 82.4 | 166.7 |
| 100 | 75.7 | 76.3 | 77.8 | 76.1 | 76.8 | 77.3 | 77.8 | 79.6 | 87.1 | 90.9 | 92.2 | 88.2 | 82.6 | 166.3 |
| 125 | 75.5 | 74.2 | 76.6 | 76.7 | 77.7 | 79.0 | 79.2 | 80.7 | 87.7 | 90.9 | 91.7 | 86.6 | 79.8 | 165.7 |
| 160 | 76.3 | 75.8 | 78.6 | 77.2 | 79.3 | 80.6 | 79.9 | 81.9 | 88.9 | 91.2 | 90.5 | 83.9 | 78.9 | 165.7 |
| 200 | 75.9 | 78.0 | 79.9 | 78.8 | 79.7 | 81.3 | 80.9 | 82.5 | 89.3 | 91.6 | 90.1 | 82.6 | 78.9 | 166.0 |
| 250 | 78.8 | 77.2 | 78.7 | 78.9 | 78.5 | 80.4 | 81.5 | 83.4 | 89.3 | 92.1 | 90.4 | 83.5 | 79.0 | 166.7 |
| 315 | 81.6 | 82.1 | 80.7 | 78.6 | 81.1 | 81.6 | 82.7 | 83.9 | 90.6 | 91.9 | 90.3 | 83.9 | 78.9 | 167.5 |
| 400 | 81.5 | 82.0 | 83.7 | 83.0 | 84.2 | 83.7 | 83.3 | 85.3 | 89.9 | 92.0 | 89.7 | 83.2 | 77.4 | 168.1 |
| 500 | 80.4 | 82.5 | 84.4 | 83.9 | 84.7 | 84.6 | 84.0 | 85.7 | 90.3 | 92.7 | 88.9 | 82.8 | 76.2 | 168.7 |
| 630 | 81.1 | 81.7 | 84.3 | 85.4 | 85.4 | 85.4 | 85.4 | 86.4 | 90.4 | 91.6 | 86.9 | 80.2 | 75.3 | 168.7 |
| 800 | 80.7 | 82.1 | 84.0 | 85.0 | 85.0 | 86.6 | 85.8 | 86.6 | 89.9 | 90.2 | 85.9 | 78.8 | 73.9 | 168.6 |
| 1000 | 79.6 | 81.4 | 84.1 | 83.7 | 85.3 | 86.2 | 85.8 | 86.2 | 89.0 | 89.7 | 83.7 | 77.5 | 71.0 | 168.6 |
| 1250 | 78.8 | 81.9 | 83.1 | 84.0 | 85.7 | 87.3 | 85.1 | 86.4 | 88.0 | 87.9 | 81.8 | 76.0 | 70.4 | 168.7 |
| 1600 | 77.4 | 80.7 | 82.6 | 83.1 | 85.3 | 86.6 | 84.3 | 84.9 | 87.0 | 87.1 | 80.1 | 74.0 | 67.7 | 169.0 |
| 2000 | 74.0 | 78.3 | 80.2 | 82.3 | 86.4 | 85.9 | 83.3 | 83.9 | 85.3 | 84.3 | 77.2 | 71.8 | 64.5 | 169.3 |
| 2500 | 72.8 | 77.6 | 81.2 | 82.2 | 85.0 | 84.8 | 81.5 | 81.0 | 83.2 | 80.5 | 73.3 | 66.9 | 59.4 | 170.2 |
| 3150 | 64.3 | 72.2 | 75.3 | 77.6 | 80.2 | 80.1 | 77.3 | 75.5 | 77.8 | 75.1 | 67.0 | 56.8 | 45.6 | 169.0 |
| 4000 | 56.1 | 62.5 | 68.3 | 69.8 | 71.6 | 71.8 | 70.5 | 68.5 | 70.3 | 66.5 | 57.1 | 44.7 | 28.7 | 168.0 |
| 5000 | 41.2 | 48.6 | 56.7 | 61.4 | 65.0 | 65.2 | 60.4 | 58.4 | 59.3 | 53.0 | 41.4 | 25.7 | 1.3 | 167.9 |
| 6300 | 20.6 | 31.0 | 41.0 | 46.0 | 47.0 | 47.7 | 45.3 | 41.2 | 42.9 | 32.6 | 18.1 | | 166.7 | |
| 8000 | | | 11.4 | 18.7 | 20.2 | 21.0 | 20.9 | 15.0 | 15.9 | 2.2 | | | 164.9 | |
| 10000 | | | | | | | | | | | | | 163.1 | |

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|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| GASPL | 90.7 | 92.1 | 94.0 | 94.1 | 95.9 | 96.3 | 95.3 | 96.4 | 100.8 | 103.0 | 102.1 | 97.6 | 91.3 | 181.4 |
| PNL | 97.6 | 100.7 | 103.4 | 104.1 | 106.4 | 106.5 | 104.5 | 105.1 | 108.2 | 108.9 | 105.6 | 99.5 | 93.4 | |
| PNLT | 97.6 | 100.7 | 104.6 | 104.7 | 107.7 | 107.7 | 105.0 | 105.6 | 108.6 | 109.4 | 105.6 | 99.5 | 94.5 | |

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

| | | | | | | | |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | SB59 | TAMB | 37.00 |
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH120 | PAMB | 29.3300 | RELHUM | 84.80 |

| | | | | |
|-------|------------|-------------------------|-------------------------------------|---------------------------|
| MODEL | TEST POINT | ACUSTIC RANGE | SIZE | FREE-JET SPEED |
| 7600 | 7617 | 731.5 M (2400.0 FT) SL | 9032.2 SQ CM (1400.00 SQ IN) - FULL | 117.96 M/SEC (387.0 FPS) |

07/19/79 18.682

724

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H., STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-ZER-FMODL X76180
BACKGROUND

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PVL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

CASPL

114.7

115.3

114.8

115.5

116.1

116.7

119.0

124.8

129.7

130.5

128.5

125.6

166.4

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MODEL TEST POINT 7618 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 0. M/SEC (0. FPS) FREE-JET SPEED

TEST DATE 02-20-78 TAPE NO. N294 IALPHA S659 TAMB 27.86
LOCATION C41 ANECH CH AERO. RDG. ADH062 PAMB 29.2950 RELHUM 27.00

07/19/79 10.662

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG F, 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-ZER-FMODL X76180

ANGLES MEASURED FROM INLET DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|-----|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | | | | | | | | | | | | | | |
| 315 | | | | | | | | | | | | | | |
| 400 | | | | | | | | | | | | | | |
| 500 | | | | | | | | | | | | | | |
| 630 | | | | | | | | | | | | | | |
| 800 | | | | | | | | | | | | | | |
| 1000 | | | | | | | | | | | | | | |
| 1250 | | | | | | | | | | | | | | |
| 1600 | | | | | | | | | | | | | | |
| 2000 | | | | | | | | | | | | | | |
| 2500 | | | | | | | | | | | | | | |
| 3150 | | | | | | | | | | | | | | |
| 4000 | | | | | | | | | | | | | | |
| 5000 | | | | | | | | | | | | | | |
| 6300 | | | | | | | | | | | | | | |
| 8000 | | | | | | | | | | | | | | |
| 10000 | | | | | | | | | | | | | | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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OASPL 114.7 115.3 115.1 114.8 115.5 116.1 116.7 119.0 124.8 129.7 130.5 128.5 125.6 166.4

| MODEL/NULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 0. | REFRACTION CORRECTION - YES |
|------------------------------|----------------------------|-------|-----------------------------|
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| TEST DATE | 02-20-78 | TAPE NO. | N294 | ALPHA | SB59 | TAMB | 27.86 |
|-----------|--------------|----------|------|--------|------|---------|--------------|
| LOCATION | C41 ANECH CH | AERO. | RDG. | ADH082 | PAMB | 29.2950 | RELHUM 27.00 |

| MODEL | TEST POINT | ACQUSTIC RANGE | SIZE | FREE-JET SPEED |
|-------|------------|-----------------------|------------------------------------|--------------------|
| 7600 | 7618 | 12.2 M (40.0 FT) ARC | 154.7 SQ CM (23.99 SQ IN) - MODEL | 0. M/SEC (0. FPS) |

07/19/79 18.682

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F. 70 PERCENT R.H. STD. DAY. SB 2400.0 FT. SL

IDENTIFICATION - FJ-ZER-FMODL X76181

ANGLES MEASURED FROM INLET DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| 50 | 68.4 | 72.5 | 73.5 | 74.0 | 75.8 | 77.8 | 80.0 | 81.3 | 88.3 | 94.3 | 95.6 | 94.6 | 88.9 | 170.2 |
| 63 | 69.9 | 73.0 | 75.1 | 75.8 | 77.9 | 79.4 | 81.1 | 82.6 | 89.6 | 96.4 | 97.2 | 95.2 | 88.7 | 171.4 |
| 80 | 71.0 | 74.8 | 76.4 | 76.9 | 84.2 | 80.7 | 82.2 | 84.4 | 91.7 | 96.7 | 98.0 | 95.2 | 89.2 | 172.1 |
| 100 | 76.0 | 76.1 | 77.7 | 78.9 | 79.7 | 81.9 | 83.2 | 86.2 | 93.4 | 98.4 | 99.2 | 95.4 | 88.6 | 173.2 |
| 125 | 79.2 | 82.6 | 83.5 | 82.0 | 82.2 | 83.2 | 84.7 | 86.7 | 93.7 | 97.9 | 99.0 | 94.3 | 87.0 | 172.9 |
| 160 | 77.1 | 82.3 | 82.9 | 84.0 | 85.0 | 86.2 | 86.0 | 87.7 | 94.3 | 97.9 | 99.7 | 93.5 | 85.2 | 173.3 |
| 200 | 84.2 | 83.0 | 82.4 | 81.7 | 83.5 | 85.0 | 86.0 | 88.5 | 94.3 | 98.4 | 98.9 | 91.0 | 83.9 | 173.1 |
| 250 | 84.9 | 86.1 | 85.8 | 84.1 | 82.4 | 83.9 | 85.6 | 88.3 | 94.7 | 98.7 | 96.4 | 89.1 | 80.9 | 172.6 |
| 315 | 84.3 | 85.7 | 86.7 | 87.0 | 86.5 | 84.5 | 88.0 | 88.5 | 94.1 | 98.6 | 94.2 | 87.2 | 78.9 | 172.3 |
| 400 | 81.1 | 84.5 | 85.8 | 86.4 | 87.0 | 86.5 | 86.5 | 88.7 | 94.2 | 96.7 | 93.0 | 85.3 | 77.0 | 171.6 |
| 500 | 79.4 | 81.7 | 83.8 | 84.7 | 85.5 | 86.5 | 86.7 | 87.9 | 93.0 | 95.6 | 90.8 | 83.2 | 74.8 | 170.7 |
| 630 | 78.0 | 81.1 | 82.6 | 83.2 | 84.5 | 86.1 | 87.3 | 88.2 | 91.7 | 94.3 | 89.4 | 81.6 | 72.3 | 170.1 |
| 800 | 75.2 | 80.0 | 81.5 | 82.4 | 83.7 | 85.5 | 86.3 | 88.2 | 90.9 | 92.6 | 87.0 | 79.4 | 70.3 | 169.4 |
| 1000 | 73.3 | 79.0 | 80.2 | 81.8 | 83.7 | 84.5 | 85.1 | 87.2 | 89.3 | 90.4 | 85.2 | 77.7 | 69.0 | 168.4 |
| 1250 | 70.9 | 77.3 | 79.3 | 80.8 | 83.5 | 84.8 | 84.0 | 86.0 | 88.0 | 89.1 | 82.8 | 76.2 | 65.9 | 168.0 |
| 1600 | 67.4 | 74.5 | 76.9 | 79.2 | 81.7 | 82.8 | 82.8 | 83.7 | 85.4 | 85.6 | 79.8 | 72.5 | 61.6 | 166.7 |
| 2000 | 64.4 | 72.0 | 76.1 | 78.0 | 81.2 | 82.2 | 80.9 | 81.7 | 82.9 | 83.8 | 76.0 | 69.0 | 57.0 | 166.5 |
| 2500 | 57.1 | 68.3 | 71.7 | 74.9 | 79.5 | 80.1 | 77.5 | 78.2 | 78.8 | 78.9 | 70.9 | 62.9 | 50.0 | 165.4 |
| 3150 | 52.5 | 61.9 | 67.2 | 69.6 | 75.5 | 76.0 | 73.4 | 72.1 | 71.5 | 71.5 | 63.5 | 53.8 | 39.4 | 164.3 |
| 4000 | 44.3 | 53.5 | 60.8 | 64.6 | 67.0 | 67.7 | 66.7 | 65.6 | 66.4 | 64.5 | 54.5 | 40.2 | 18.7 | 163.7 |
| 5000 | 29.3 | 41.4 | 49.0 | 53.7 | 59.7 | 60.2 | 56.0 | 55.5 | 55.3 | 52.5 | 39.5 | 21.0 | 163.4 | |
| 6300 | 4.1 | 19.8 | 29.1 | 37.0 | 41.9 | 42.9 | 41.1 | 37.6 | 38.9 | 31.5 | 16.4 | | 161.5 | |
| 8000 | | | 2.2 | 11.2 | 15.3 | 16.9 | 17.3 | 12.3 | 13.3 | 0.7 | | | 160.9 | |
| 10000 | | | | | | | | | | | | | 162.4 | |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-20-78 TAPE NO. N294 ALPHA SB59 TAMB 27.86
LOCATION C41 ANECH CH AERO. RDG. ADH082 PAMB 29.2950 RELHUM 27.00

MODEL TEST POINT ACUSTIC RANGE SIZE FREE-JET SPEED
7600 7618 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 0. M/SEC (0. FPS)

07/17/79 10.160

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-300-FMODL X76190
BACKGROUND FJB300-FMODL X01300

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PHL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

100000

125000

160000

200000

250000

315000

400000

500000

630000

800000

1000000

1250000

1600000

2000000

2500000

3150000

4000000

5000000

6300000

8000000

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TEST DATE 02-27-78 TAPE NO. N299 IALPHA SB59 TAMB 27.66
LOCATION C41 ANECH CH AERO. RDG. ADH108 PAMB 29.5400 RELHUM 43.20

MODEL TEST POINT 7619 ACUSTIC RANGE 12.2 M (40.0 FT) ARC 154.7 SQ CM (23.99 SQ IN) - MODEL 69.61 M/SEC (294.0 FPS) FREE-JET SPEED

727

07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-300-FMODL X76190

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PWL

FREQ

50

63

80

100

125

160

200

250

315

400

500

630

800

1000

1250

1600

2000

2500

3150

4000

5000

6300

8000

10000

12500

16000

20000

25000

31500

40000

50000

63000

80000

CASPL

118.9

117.5

116.7

116.3

117.2

115.6

117.2

123.4

126.2

128.8

126.3

122.8

165.0

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MODEL/FULL SIZE SCALE FACTOR INPUT 1.000 CALC. 1.000 **FREE JET VELOCITY (FT/SEC)** 294.00 **REFRACTION CORRECTION - YES** **TURBULANCE CORRECTION - YES**

TEST DATE 02-27-78 **TAPE NO.** N299 **ALPHA** SB59 **TAMB** 27.68
LOCATION C41 ANECH CH **AERO. RDG.** ADH108 **PAMB** 29.5400 **RELHUM** 43.20

MODEL 7600 **TEST POINT** 7619 **ACOUSTIC RANGE** 12.2 M (40.0 FT) **ARC** 154.7 SQ CM (23.99 SQ IN) **SIZE** **FREE-JET SPEED** 69.61 M/SEC (294.0 FPS)

07/17/79 10.160

FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-300-FMODL X76191

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 69.1 | 70.5 | 71.3 | 72.3 | 73.3 | 74.7 | 74.6 | 76.3 | 84.3 | 91.5 | 93.6 | 92.4 | 86.3 | 167.9 |
| 63 | 70.7 | 71.8 | 73.2 | 74.3 | 74.7 | 76.3 | 76.0 | 77.5 | 86.6 | 91.8 | 95.0 | 92.8 | 85.5 | 168.6 |
| 80 | 71.9 | 72.8 | 74.8 | 75.4 | 78.5 | 77.9 | 77.4 | 79.6 | 88.7 | 93.4 | 96.6 | 93.6 | 85.4 | 169.9 |
| 100 | 72.7 | 73.9 | 75.5 | 77.0 | 77.3 | 78.7 | 78.7 | 80.7 | 90.4 | 93.7 | 97.0 | 93.4 | 84.9 | 170.3 |
| 125 | 75.5 | 74.2 | 75.9 | 78.4 | 78.9 | 80.0 | 80.2 | 82.0 | 90.6 | 92.9 | 97.7 | 92.2 | 83.2 | 170.2 |
| 160 | 77.0 | 77.0 | 78.7 | 79.7 | 81.1 | 82.4 | 81.3 | 83.8 | 91.4 | 93.4 | 97.6 | 90.7 | 82.8 | 170.5 |
| 200 | 79.4 | 79.9 | 80.2 | 83.4 | 82.0 | 83.0 | 82.9 | 84.1 | 91.9 | 94.6 | 96.7 | 88.8 | 81.4 | 170.4 |
| 250 | 81.8 | 88.9 | 86.8 | 88.8 | 83.7 | 82.5 | 82.4 | 84.3 | 91.3 | 94.7 | 94.9 | 87.1 | 79.6 | 170.9 |
| 315 | 88.0 | 89.5 | 90.6 | 89.7 | 89.3 | 86.1 | 83.5 | 85.2 | 92.6 | 94.0 | 93.6 | 85.6 | 77.8 | 171.0 |
| 400 | 84.6 | 86.4 | 88.6 | 87.7 | 88.6 | 90.3 | 86.0 | 86.1 | 91.8 | 92.9 | 91.7 | 83.0 | 75.1 | 170.2 |
| 500 | 83.5 | 85.4 | 86.6 | 85.4 | 85.6 | 87.5 | 87.1 | 86.1 | 91.8 | 93.0 | 90.4 | 81.6 | 74.0 | 169.8 |
| 630 | 82.1 | 82.8 | 85.0 | 84.9 | 84.7 | 86.0 | 86.4 | 87.1 | 92.2 | 91.8 | 88.3 | 79.7 | 72.2 | 169.4 |
| 800 | 80.3 | 82.0 | 84.2 | 84.4 | 84.4 | 86.7 | 85.7 | 87.4 | 91.9 | 90.7 | 86.9 | 78.1 | 71.2 | 169.2 |
| 1000 | 79.2 | 81.6 | 83.6 | 84.0 | 85.0 | 86.4 | 85.7 | 87.4 | 91.0 | 90.1 | 85.3 | 76.7 | 68.6 | 169.3 |
| 1250 | 77.9 | 80.5 | 82.7 | 83.7 | 84.3 | 86.0 | 84.7 | 86.6 | 87.8 | 87.3 | 82.6 | 74.2 | 66.3 | 168.2 |
| 1600 | 75.9 | 79.3 | 81.8 | 81.9 | 83.5 | 85.3 | 82.8 | 84.2 | 86.0 | 85.8 | 79.8 | 71.8 | 63.7 | 167.8 |
| 2000 | 72.0 | 76.8 | 79.5 | 82.3 | 83.7 | 84.7 | 81.7 | 82.5 | 83.4 | 82.3 | 77.1 | 69.2 | 61.0 | 167.7 |
| 2500 | 69.8 | 75.4 | 78.5 | 79.2 | 82.3 | 82.9 | 78.1 | 79.3 | 80.8 | 77.9 | 72.9 | 64.1 | 55.7 | 167.7 |
| 3150 | 61.4 | 69.7 | 72.6 | 74.5 | 77.8 | 79.0 | 74.3 | 73.2 | 74.3 | 73.3 | 65.6 | 53.5 | 39.9 | 166.6 |
| 4000 | 53.4 | 60.5 | 65.6 | 68.9 | 69.9 | 70.5 | 67.3 | 65.7 | 66.5 | 64.5 | 55.5 | 40.7 | 22.7 | 165.7 |
| 5000 | 39.1 | 46.8 | 55.0 | 58.6 | 63.3 | 63.6 | 57.5 | 55.8 | 56.9 | 50.6 | 39.3 | 21.5 | | 165.7 |
| 6300 | 17.7 | 29.0 | 38.7 | 41.4 | 45.3 | 46.5 | 42.3 | 38.3 | 41.0 | 30.8 | 16.7 | | | 164.3 |
| 8000 | | | 8.8 | 14.8 | 18.8 | 20.2 | 18.4 | 12.2 | 14.6 | 1.7 | | | | 163.1 |
| 10000 | | | | | | | | | | | | | | 161.8 |
| 12500 | | | | | | | | | | | | | | |
| 16000 | | | | | | | | | | | | | | |
| 20000 | | | | | | | | | | | | | | |
| 25000 | | | | | | | | | | | | | | |
| 31500 | | | | | | | | | | | | | | |
| 40000 | | | | | | | | | | | | | | |
| 50000 | | | | | | | | | | | | | | |
| 63000 | | | | | | | | | | | | | | |
| 80000 | | | | | | | | | | | | | | |

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GASPL 95.3 95.4 96.5 96.7 96.6 97.5 95.9 97.0 102.7 104.6 106.1 101.2 93.5 162.6
PNL 100.9 101.7 103.4 104.2 105.4 106.2 103.7 104.6 108.5 109.3 108.7 101.6 93.5
PNLT 102.2 102.4 104.2 104.7 106.6 107.4 103.7 104.6 109.1 109.8 108.7 101.5 94.7

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 IALPHA SB59 TAMB 27.88
LOCATION C41 ANECH CH AERO. RDG. ADH108 PAMB 29.5400 RELHUM 43.20

MODEL TEST POINT 7619 ACQUSTIC RANGE 731.5 M (2400.0 FT) SL 8032.2 SQ CH (1400.00 SQ IN) - FULL 89.61 M/SEC (294.0 FPS) FREE-JET SPEED

UNTRANSFORMED MODEL SOUND PRESSURE LEVELS CORRECTED FOR BACKGROUND NOISE
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - MODEL FJ-400-FMODL X76200
BACKGROUND FJB400-FMODL X01400

ANGLES MEASURED FROM INLET, DEGREES

40. 50. 60. 70. 80. 90. 100. 110. 120. 130. 140. 150. 160. PNL

FREQ

50

63

80

100

125

160

200

| | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 250 | 83.6 | 85.1 | 86.4 | 87.2 | 87.8 | 90.2 | 92.1 | 94.8 | 99.8 | 105.4 | 109.5 | 113.5 | 113.1 | 146.4 |
| 315 | 85.3 | 86.3 | 87.1 | 87.1 | 89.0 | 91.1 | 91.7 | 94.4 | 100.9 | 107.7 | 111.6 | 114.8 | 113.0 | 147.7 |
| 400 | 86.9 | 87.1 | 88.8 | 87.8 | 89.5 | 91.6 | 92.5 | 95.2 | 103.2 | 110.8 | 114.4 | 115.8 | 111.5 | 149.3 |
| 500 | 87.2 | 87.7 | 89.7 | 89.8 | 90.6 | 93.0 | 93.9 | 96.0 | 104.3 | 112.6 | 116.7 | 118.9 | 109.3 | 150.4 |
| 630 | 88.6 | 89.3 | 90.9 | 91.1 | 95.5 | 94.6 | 95.7 | 98.9 | 106.6 | 114.0 | 117.6 | 118.5 | 106.2 | 151.1 |
| 800 | 91.3 | 89.6 | 91.6 | 92.4 | 93.0 | 95.6 | 97.0 | 100.2 | 108.7 | 114.7 | 118.9 | 114.1 | 104.5 | 151.8 |
| 1000 | 93.9 | 92.7 | 94.3 | 93.5 | 94.5 | 97.0 | 98.4 | 101.5 | 109.6 | 115.3 | 119.0 | 112.1 | 102.6 | 151.9 |
| 1250 | 100.3 | 100.9 | 97.9 | 97.2 | 96.7 | 98.4 | 99.5 | 102.9 | 110.5 | 114.5 | 120.1 | 111.8 | 102.4 | 152.5 |
| 1600 | 107.4 | 105.5 | 103.8 | 100.3 | 97.6 | 99.6 | 100.9 | 103.8 | 111.2 | 115.4 | 119.6 | 111.5 | 103.1 | 152.7 |
| 2000 | 106.1 | 106.9 | 107.6 | 106.2 | 101.7 | 99.6 | 100.5 | 104.2 | 112.0 | 116.5 | 118.9 | 110.4 | 102.6 | 153.0 |
| 2500 | 103.8 | 103.8 | 105.8 | 106.3 | 106.7 | 104.5 | 102.9 | 105.3 | 112.0 | 116.4 | 118.1 | 109.8 | 101.8 | 152.8 |
| 3150 | 102.3 | 101.6 | 102.9 | 104.2 | 105.0 | 107.8 | 105.0 | 106.4 | 113.1 | 116.3 | 116.5 | 108.9 | 101.4 | 152.4 |
| 4000 | 101.5 | 100.8 | 102.1 | 101.8 | 101.8 | 104.7 | 106.1 | 107.1 | 112.2 | 115.5 | 115.1 | 107.0 | 99.5 | 151.4 |
| 5000 | 100.6 | 100.2 | 101.3 | 101.2 | 101.8 | 103.4 | 104.8 | 108.0 | 112.4 | 115.2 | 113.5 | 105.4 | 98.4 | 151.0 |
| 6300 | 98.9 | 99.8 | 100.9 | 100.6 | 101.3 | 103.9 | 104.9 | 108.6 | 112.0 | 113.3 | 112.0 | 104.0 | 97.7 | 150.3 |
| 8000 | 98.9 | 99.1 | 100.2 | 100.3 | 101.6 | 102.7 | 103.8 | 107.4 | 111.8 | 112.8 | 111.0 | 103.1 | 96.7 | 150.1 |
| 10000 | 97.3 | 99.2 | 99.9 | 99.7 | 101.6 | 103.7 | 103.1 | 106.9 | 110.8 | 111.6 | 109.2 | 102.2 | 96.8 | 149.7 |
| 12500 | 95.7 | 97.3 | 98.8 | 98.6 | 100.4 | 102.0 | 101.7 | 104.8 | 108.3 | 109.1 | 106.7 | 100.7 | 94.7 | 148.3 |
| 16000 | 94.2 | 96.0 | 98.3 | 98.9 | 100.3 | 101.8 | 100.3 | 102.9 | 105.3 | 107.9 | 104.2 | 98.9 | 94.1 | 148.1 |
| 20000 | 89.2 | 93.9 | 95.1 | 96.5 | 99.7 | 103.6 | 97.5 | 100.3 | 102.4 | 104.3 | 100.9 | 96.3 | 91.8 | 147.1 |
| 25000 | 88.5 | 89.9 | 93.0 | 93.0 | 97.4 | 98.0 | 94.8 | 95.1 | 100.2 | 99.8 | 96.6 | 92.8 | 90.1 | 146.2 |
| 31500 | 86.6 | 86.0 | 90.0 | 91.8 | 92.1 | 92.6 | 91.3 | 92.8 | 95.5 | 97.1 | 93.9 | 88.3 | 85.1 | 145.7 |
| 40000 | 81.6 | 81.9 | 84.9 | 85.8 | 90.1 | 90.5 | 86.1 | 87.6 | 90.4 | 91.9 | 88.5 | 82.6 | 80.0 | 145.2 |
| 50000 | 74.2 | 74.8 | 77.0 | 79.4 | 81.1 | 83.1 | 80.8 | 80.3 | 86.3 | 84.6 | 81.8 | 77.5 | 73.9 | 143.0 |
| 63000 | 68.8 | 68.3 | 71.2 | 73.3 | 73.4 | 74.3 | 75.1 | 73.7 | 82.1 | 77.9 | 75.3 | 71.0 | 68.1 | 142.3 |
| 80000 | 63.3 | 61.7 | 65.7 | 67.8 | 67.8 | 68.7 | 67.2 | 67.4 | 75.1 | 73.2 | 70.8 | 62.7 | 59.9 | 142.9 |

GASPL 113.2 113.1 113.7 113.4 113.6 114.8 114.6 117.4 122.9 126.7 129.0 124.5 119.3 164.1

TEST DATE 02-27-78

LOCATION C41 ANECH CH

TAPE NO. N299

AERO. RDG. ADH107

IALPHA SB59

PAMB 29.5400

TAMB 28.58

RELHUM 43.50

MODEL TEST POINT

7620

ACQUSTIC RANGE

12.2 M (40.0 FT) ARC

SIZE

154.7 SQ CM (23.99 SQ IN) - MODEL

FREE-JET SPEED

117.96 M/SEC (387.0 FPS)

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07/17/79 10.160

FLIGHT TRANSFORMED MODEL SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 40.0 FT. ARC

IDENTIFICATION - FJ-400-FMODL X76200

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 50 | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | |
| 80 | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | |
| 125 | | | | | | | | | | | | | | |
| 160 | | | | | | | | | | | | | | |
| 200 | | | | | | | | | | | | | | |
| 250 | 90.7 | 92.0 | 90.9 | 90.3 | 89.3 | 90.2 | 90.3 | 91.3 | 97.5 | 103.5 | 106.9 | 110.5 | 110.4 | 143.9 |
| 315 | 90.7 | 92.0 | 90.9 | 90.3 | 90.7 | 91.3 | 90.4 | 91.7 | 101.0 | 107.6 | 111.0 | 113.2 | 111.3 | 146.7 |
| 400 | 92.4 | 92.3 | 91.7 | 90.3 | 91.2 | 91.9 | 91.7 | 93.3 | 102.6 | 110.6 | 114.6 | 116.4 | 112.2 | 149.3 |
| 500 | 93.2 | 92.6 | 93.1 | 90.9 | 92.4 | 93.3 | 93.1 | 94.3 | 104.6 | 111.6 | 116.7 | 118.7 | 111.0 | 149.9 |
| 630 | 94.5 | 93.6 | 94.4 | 93.1 | 92.4 | 95.0 | 94.6 | 96.9 | 107.1 | 112.9 | 117.5 | 118.4 | 111.6 | 151.0 |
| 800 | 96.0 | 95.5 | 95.7 | 93.5 | 94.9 | 96.1 | 96.2 | 98.1 | 109.5 | 113.6 | 118.1 | 114.6 | 112.3 | 151.5 |
| 1000 | 98.0 | 96.4 | 96.2 | 95.7 | 96.4 | 97.6 | 97.6 | 99.5 | 109.4 | 113.0 | 114.3 | 112.2 | 112.2 | 152.0 |
| 1250 | 98.4 | 97.5 | 98.1 | 96.4 | 98.4 | 99.1 | 98.6 | 101.0 | 110.3 | 114.3 | 119.1 | 114.4 | 113.2 | 152.4 |
| 1600 | 107.0 | 106.4 | 102.1 | 100.0 | 99.7 | 100.7 | 100.5 | 102.2 | 111.3 | 115.5 | 118.6 | 113.3 | 112.9 | 152.7 |
| 2000 | 114.7 | 111.7 | 108.7 | 103.6 | 104.5 | 100.6 | 100.3 | 102.7 | 111.6 | 115.6 | 118.0 | 113.0 | 112.3 | 153.6 |
| 2500 | 115.9 | 115.1 | 114.1 | 110.7 | 109.2 | 106.0 | 103.0 | 104.2 | 113.1 | 116.1 | 116.6 | 112.5 | 112.4 | 155.0 |
| 3150 | 109.6 | 109.1 | 110.4 | 109.9 | 108.1 | 109.7 | 105.5 | 105.7 | 112.6 | 115.7 | 115.6 | 110.6 | 110.0 | 153.4 |
| 4000 | 108.6 | 108.1 | 108.3 | 108.4 | 105.3 | 107.1 | 107.1 | 106.8 | 113.2 | 115.5 | 114.2 | 109.0 | 108.7 | 152.6 |
| 5000 | 108.2 | 106.9 | 107.3 | 105.1 | 105.8 | 106.4 | 106.3 | 108.1 | 112.9 | 113.7 | 112.7 | 107.7 | 108.1 | 151.8 |
| 6300 | 107.6 | 106.6 | 106.9 | 105.9 | 105.3 | 106.9 | 106.3 | 108.6 | 112.9 | 113.3 | 111.9 | 106.9 | 107.1 | 151.8 |
| 8000 | 106.0 | 106.2 | 106.4 | 105.2 | 105.6 | 105.7 | 105.2 | 107.5 | 112.0 | 112.4 | 110.3 | 106.2 | 106.5 | 151.2 |
| 10000 | 105.7 | 105.2 | 105.5 | 104.7 | 105.5 | 105.7 | 104.7 | 107.1 | 110.1 | 110.5 | 108.5 | 105.7 | 106.9 | 150.7 |
| 12500 | 103.9 | 105.1 | 105.0 | 103.9 | 104.4 | 105.0 | 103.6 | 105.2 | 108.0 | 110.2 | 107.1 | 105.2 | 107.7 | 150.5 |
| 16000 | 101.7 | 102.7 | 103.3 | 102.2 | 104.3 | 104.6 | 102.3 | 103.6 | 106.1 | 107.7 | 105.0 | 103.6 | 106.5 | 150.2 |
| 20000 | 99.9 | 101.0 | 102.5 | 102.1 | 104.3 | 103.6 | 99.8 | 101.5 | 105.4 | 104.9 | 102.1 | 101.3 | 105.4 | 150.5 |
| 25000 | 96.9 | 100.4 | 100.3 | 100.2 | 101.9 | 101.0 | 97.3 | 96.9 | 100.6 | 102.0 | 99.4 | 97.2 | 101.2 | 150.0 |
| 31500 | 95.5 | 95.7 | 97.4 | 95.9 | 96.1 | 95.6 | 93.6 | 94.0 | 95.9 | 95.2 | 95.6 | 92.9 | 97.4 | 149.1 |
| 40000 | 90.0 | 88.7 | 91.9 | 92.8 | 94.6 | 93.5 | 88.5 | 89.2 | 93.2 | 91.3 | 89.2 | 88.2 | 91.7 | 148.8 |
| 50000 | 87.3 | 86.5 | 88.1 | 87.5 | 85.6 | 86.1 | 83.2 | 81.8 | 89.6 | 85.1 | 83.2 | 82.3 | 86.6 | 147.7 |
| 63000 | 78.9 | 78.4 | 79.2 | 80.2 | 77.4 | 77.3 | 77.4 | 75.1 | 82.9 | 80.6 | 78.6 | 73.6 | 77.9 | 145.7 |
| 80000 | 68.4 | 68.2 | 70.3 | 71.5 | 71.6 | 71.7 | 69.1 | 68.0 | 73.1 | 70.8 | 68.8 | 63.6 | 68.1 | 144.0 |

OASPL 120.8 119.7 119.1 117.4 116.9 117.1 115.6 117.1 123.2 126.1 126.3 125.2 123.6 165.1

| | | | |
|------------------------------|----------------------------|--------|-----------------------------|
| MODEL/FULL SIZE SCALE FACTOR | FREE JET VELOCITY (FT/SEC) | 367.00 | REFRACTION CORRECTION - YES |
| INPUT 1.000 CALC. 1.000 | FREE JET DIAMETER (IN) | 48.00 | TURBULANCE CORRECTION - YES |

| | | | | | | | |
|-----------|--------------|------------|--------|-------|---------|--------|-------|
| TEST DATE | 02-27-78 | TAPE NO. | N299 | ALPHA | S859 | TAMB | 28.56 |
| LOCATION | C41 ANECH CH | AERO. RDG. | ADH107 | PAMB | 29.5400 | RELHUM | 43.50 |

| | | | | | | | | |
|-------|------------|----------------|-----|------------------------|------|--------------|---------|---------------------------|
| MODEL | TEST POINT | ACOUSTIC RANGE | ARC | 154.7 SQ CH (40.0 FT) | SIZE | 23.99 SQ IN) | - MODEL | 117.96 M/SEC (367.0 FPS) |
| 7600 | 7620 | 12.2 M (| | | | | | |

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FLIGHT TRANSFORMED, SCALED, AND EXTRAPOLATED SOUND PRESSURE LEVELS
59.0 DEG. F., 70 PERCENT R.H. STD. DAY, SB 2400.0 FT. SL

IDENTIFICATION - FJ-400-FMODL X76201

ANGLES MEASURED FROM INLET, DEGREES

| FREQ | 40. | 50. | 60. | 70. | 80. | 90. | 100. | 110. | 120. | 130. | 140. | 150. | 160. | PWL |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 50 | 70.6 | 72.0 | 72.5 | 71.9 | 73.1 | 74.0 | 73.7 | 74.9 | 83.5 | 90.3 | 93.0 | 91.4 | 84.9 | 166.9 |
| 63 | 71.4 | 72.3 | 73.9 | 72.5 | 74.4 | 75.4 | 75.0 | 75.8 | 85.6 | 91.5 | 93.9 | 91.7 | 83.6 | 167.6 |
| 80 | 72.6 | 73.5 | 75.2 | 74.6 | 79.3 | 77.0 | 76.7 | 78.4 | 87.9 | 92.6 | 95.6 | 91.3 | 84.4 | 168.7 |
| 100 | 74.0 | 75.2 | 76.4 | 75.0 | 76.8 | 78.1 | 78.0 | 79.6 | 89.2 | 93.5 | 96.2 | 90.4 | 84.7 | 169.2 |
| 125 | 76.0 | 74.9 | 76.8 | 77.0 | 78.1 | 79.5 | 79.4 | 80.9 | 90.0 | 92.6 | 97.2 | 89.9 | 84.4 | 169.7 |
| 160 | 77.1 | 76.9 | 78.6 | 77.6 | 80.1 | 80.9 | 80.5 | 82.2 | 90.8 | 93.6 | 96.9 | 89.8 | 85.0 | 170.0 |
| 200 | 84.5 | 85.5 | 82.4 | 81.1 | 81.2 | 82.4 | 82.0 | 83.2 | 91.7 | 94.7 | 96.1 | 88.4 | 84.2 | 170.3 |
| 250 | 91.9 | 90.6 | 88.8 | 84.7 | 85.8 | 82.3 | 81.6 | 83.6 | 91.7 | 94.7 | 95.2 | 87.7 | 83.0 | 171.3 |
| 315 | 92.7 | 93.7 | 93.9 | 91.3 | 90.3 | 87.2 | 84.1 | 84.8 | 92.9 | 94.6 | 93.6 | 86.6 | 82.2 | 172.6 |
| 400 | 85.9 | 87.3 | 89.8 | 90.2 | 88.8 | 90.6 | 86.2 | 86.0 | 92.2 | 93.9 | 92.0 | 84.1 | 78.9 | 171.0 |
| 500 | 85.4 | 85.8 | 87.4 | 88.3 | 85.8 | 87.7 | 87.6 | 86.8 | 92.3 | 93.3 | 89.9 | 81.8 | 76.5 | 170.3 |
| 630 | 83.4 | 84.3 | 86.1 | 85.8 | 85.9 | 86.7 | 86.4 | 87.7 | 91.7 | 91.0 | 88.0 | 79.8 | 74.9 | 169.4 |
| 800 | 82.4 | 83.6 | 85.3 | 85.3 | 85.2 | 87.0 | 86.3 | 88.1 | 91.3 | 90.3 | 86.6 | 78.3 | 72.8 | 169.4 |
| 1000 | 80.3 | 82.9 | 84.6 | 84.4 | 85.4 | 85.7 | 85.0 | 86.7 | 90.3 | 89.0 | 84.6 | 77.0 | 71.0 | 168.9 |
| 1250 | 79.6 | 81.6 | 83.5 | 83.7 | 85.2 | 86.6 | 84.4 | 86.1 | 88.1 | 86.8 | 82.4 | 76.6 | 70.0 | 168.4 |
| 1600 | 76.9 | 80.9 | 82.5 | 82.6 | 83.7 | 84.6 | 82.9 | 84.0 | 85.6 | 86.0 | 80.1 | 73.8 | 68.4 | 168.2 |
| 2000 | 73.7 | 77.9 | 80.5 | 80.7 | 83.5 | 84.3 | 81.5 | 82.1 | 83.3 | 82.9 | 77.0 | 70.7 | 64.2 | 167.9 |
| 2500 | 70.1 | 74.9 | 78.8 | 79.9 | 82.9 | 82.5 | 78.4 | 79.3 | 81.8 | 78.8 | 72.3 | 65.4 | 58.2 | 168.2 |
| 3150 | 63.8 | 71.9 | 74.8 | 76.4 | 79.2 | 78.6 | 74.5 | 73.1 | 73.1 | 73.5 | 66.3 | 56.4 | 45.6 | 167.7 |
| 4000 | 56.1 | 62.5 | 68.0 | 68.9 | 70.4 | 70.3 | 67.9 | 67.0 | 67.5 | 65.0 | 56.2 | 43.1 | 27.3 | 166.7 |
| 5000 | 40.8 | 47.9 | 56.3 | 60.4 | 63.9 | 63.4 | 57.8 | 56.8 | 57.5 | 50.5 | 40.0 | 24.7 | | 166.4 |
| 6300 | 20.4 | 31.5 | 40.4 | 44.3 | 44.9 | 46.1 | 42.4 | 38.6 | 41.9 | 30.1 | 16.3 | | | 165.4 |
| 8000 | | | 10.2 | 17.7 | 18.5 | 19.5 | 18.5 | 12.6 | 13.9 | 0.7 | | | | 163.4 |
| 9000 | | | | | | | | | | | | | | 161.6 |

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GASPL 97.2 97.8 98.3 97.3 97.2 97.5 95.8 96.8 102.5 104.5 105.6 99.9 94.0 162.7
 PNL 102.7 104.3 106.4 104.4 105.9 105.9 103.6 104.3 108.5 109.6 108.3 101.3 95.8
 PNL 103.3 105.1 106.2 105.1 107.1 103.6 104.3 109.2 110.1 108.3 101.3 95.8

DIAMETER RATIO 7.640 FREQUENCY SHIFT -9

TEST DATE 02-27-78 TAPE NO. N299 IALPHA SB59 TAMB 28.58
 LOCATION C41 ANECH CH AERG. RDG. ADH107 PAMB 29.5400 RELHUM 43.80

MODEL TEST POINT ACQUSTIC RANGE SIZE FREE-JET SPEED
 7600 7620 731.5 M (2400.0 FT) SL 9032.2 SQ CM (1400.00 SQ IN) - FULL 117.98 M/SEC (387.0 FPS)

6.2 LASER VELOCIMETER TEST RESULTS

All the parameters employed in the LV test results tables are defined below:

| | |
|---------|---|
| Model | Denotes the model number of the nozzle |
| Point | Denotes the test point number |
| Deq | Defined as the equivalent diameter based on the flow area, inches |
| R_2^o | Outer flow radius, inches |
| V_j^o | Outer flow velocity, ft/sec |
| V_j^i | Inner flow velocity, ft/sec |
| V_j^m | Mixed flow velocity, ft/sec |

$$V_j^m = \frac{V_j^o w^o + V_j^i w^i}{w^o + w^i}$$

| | |
|-------------------------|---|
| $V_{a/c}$ | Free jet speed, ft/sec |
| Type Trav | Could be radial traverse (North-South or East-West) or axial traverse |
| Position | Position in volts of linear voltage displacement transducer (LVDT), volts |
| Histo No. | Histogram number |
| \bar{U} | Mean velocity, ft/sec |
| u' | Turbulent velocity, ft/sec |
| $\frac{\bar{U}}{V_j^o}$ | Mean velocity normalized with outer velocity |
| $\frac{u'}{V_j^m}$ | Turbulent velocity normalized with mixed velocity |
| $\frac{\bar{U}}{V_j^m}$ | Mean velocity normalized with mixed velocity |
| X | Distance from
Exit plane of outer nozzle |

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The laser velocimeter test results taken from LV histogram and traverses are presented in Sections 6.2.1 through 6.2.7 for Models 1, 1A, 2, 3, 5, 6, and 7, respectively. The type of traverse, position, and histogram number is given along with the mean and turbulent velocity data. The velocities are normalized with respect to the outer flow velocity (V_j^o) and the "mixed" velocity (V^M). The laser velocimeter positions were shown in Figure 14.

6.2.1 Laser Velocimeter Data for Model 1

6.2.1.1 Laser Velocimeter (LV) Point Histogram Measurements for Model 1

Table XVI contains a description of all the basic types of LV measurement, LV position, histogram identification number (Histo No.) and tabulated mean velocity and turbulent velocity information obtained from the existing point LV histogram measurements.

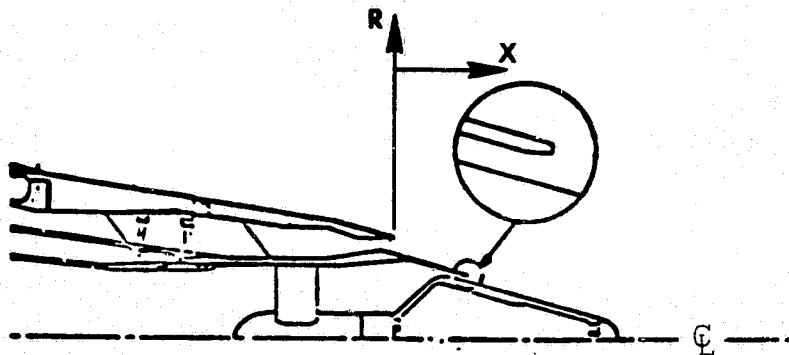
Following Table XVI are the LV mean velocity traces taken to locate where the point LV histogram measurements were to be taken as well as for general ¹⁰⁰dynamic information.

$$R_r^o = 0.853 \quad \text{C-D outer nozzle}$$

$$R_r^i = 0.953 \quad \text{C-D inner nozzle}$$

$$A^i/A^o = 0.137$$

with struts in outer flow



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Table XVI. LV Log Sheet Model 1.

| TYPE | POSITION (VOLTS) | AXIAL | EW | NS | AXIAL PLANE | POSITION X MS | AXIAL POSITION X DEG | RADIAL POSITION LOC. | R. MS. | R/K ₂ | HISTO No. | J FPS | U' FPS | D/1/3 | U/1/3 | V/1/3 | U/1/3 | V/1/3 |
|-------|------------------|-------|--------|----|-------------|---------------|----------------------|----------------------|--------|------------------|-----------|-------|--------|-------|-------|-------|-------|-------|
| REF | 3.108 | 4.971 | 13.381 | | | | | | | | | | | | | | | |
| AXIAL | — | 4.971 | 13.381 | | — | — | — | E | 0 | — | 3172 | — | — | — | — | — | — | — |
| AXIAL | — | 5.388 | | | — | — | — | E | 139 | .303 | 3174 | — | — | — | — | — | — | — |
| AXIAL | — | 5.778 | | | — | — | — | — | 2.69 | .586 | 3175 | — | — | — | — | — | — | — |
| AXIAL | — | 5.960 | | | — | — | — | — | 3.30 | .718 | 3176 | — | — | — | — | — | — | — |
| AXIAL | — | 6.210 | | | — | — | — | — | 4.16 | .806 | 3177 | — | — | — | — | — | — | — |
| E-W | 3.131 | — | | | A | 1.52 | 2.94 | — | — | — | 3178 | — | — | — | — | — | — | — |
| | | 3.725 | | | — | — | — | W | 4.15 | .904 | 3179 | 2384 | 97.5 | 9.69 | .040 | 1.046 | .043 | |
| | | 3.808 | | | — | — | — | " | 3.88 | .844 | 3180 | 2382 | 254 | 9.86 | .105 | 1.043 | .111 | |
| | | 6.045 | | | — | — | — | E | 3.58 | .779 | 3181 | 2498 | 239 | 1.034 | .099 | 1.094 | .105 | |
| | | 6.154 | | | — | — | — | — | 3.94 | .859 | 3182 | 2397 | 260 | 9.92 | .108 | 1.050 | .114 | |
| | | 6.235 | | | — | — | — | — | 4.21 | .917 | 3183 | 2333 | 112 | 9.66 | .046 | 1.022 | .049 | |
| E-W | 3.146 | — | | | B | 2.52 | 4.87 | — | — | — | 3184 | — | — | — | — | — | — | — |
| " | " | 3.796 | | | " | " | " | W | 3.92 | .853 | 3185 | 2218 | 64.1 | 9.88 | .014 | 9.72 | .028 | |
| E-W | 3.161 | — | | | C | 3.51 | 1.78 | — | — | — | 3186 | — | — | — | — | — | — | — |
| | | 6.078 | | | — | — | — | E | 3.69 | .803 | 3187 | 2303 | 131 | 9.53 | .054 | 1.010 | .057 | |
| | | 5.975 | | | — | — | — | — | 3.35 | .729 | 3188 | 2344 | 120 | 9.70 | .050 | 1.026 | .053 | |
| | | 5.922 | | | — | — | — | — | 3.17 | .690 | 3189 | 2304 | 86.4 | 9.54 | .036 | 1.009 | .038 | |
| | | 5.869 | | | — | — | — | — | 2.99 | .652 | 3190 | 2232 | 58.2 | 9.24 | .024 | 9.77 | .026 | |
| | | 3.890 | | | — | — | — | W | 3.60 | .784 | 3191 | 2352 | 118 | 9.74 | .049 | 1.030 | .052 | |
| E-W | 3.176 | — | | | D | 4.50 | .869 | — | — | — | 3192 | — | — | — | — | — | — | — |
| " | " | 3.970 | | | " | " | " | W | 3.34 | .726 | 3193 | 2369 | 190 | 9.81 | .079 | 1.038 | .083 | |
| E-W | 3.191 | — | | | E | 5.50 | 1.062 | — | — | — | 3194 | — | — | — | — | — | — | — |
| | | 3.942 | | | — | — | — | W | 3.43 | .747 | 3195 | 2122 | 189 | 8.18 | .078 | 9.29 | .083 | |
| | | 4.224 | | | — | — | — | " | 2.50 | .544 | 3196 | 1443 | 20.8 | 5.88 | .029 | .632 | .031 | |
| | | 5.591 | | | — | — | — | E | 2.07 | .450 | 3197 | 1449 | 41.4 | 6.00 | .017 | .635 | .018 | |

Table XVI. LV Log Sheet Model 1 (Continued).

| | | | | | | | | | | | | | | | | | | | |
|-------|------------------|-------|--------|----------------|-------------|----------------|-------|---------------------------|-----------------|---------------------------|-----------|--------------|-----|------|-----|------------------|------------------|------------------|------------------|
| MODEL | | 1 | | Deg | | 5.178 | | V _j = 2416 FPS | | V _m = 2283 FPS | | Date 1/23/60 | | | | | | | |
| POINT | | 101 | | R _i | | 4.593 | | V _j = 1636 FPS | | V _m = 0 | | | | | | | | | |
| TYPE | POSITION (VOLTS) | AXIAL | EW | NS | AXIAL PLANE | POSITION X INS | Y Deg | RADIAL POSITION LOC. | R _{ms} | R _{1/2} | HISTO No. | U | FPS | U' | FPS | U _{1/2} | V _{1/2} | V _{1/2} | V _{1/2} |
| REF | 3.108 | 4.971 | 13.381 | | | | | | | | | | | | | | | | |
| | 3.191 | 5.691 | 13.381 | | E | 5.53 | 1062 | E | 2.40 | 5.22 | 3198 | 2281 | | 102 | 944 | 0.42 | 999 | 0.45 | |
| | | 5.807 | | | | | | | 2.79 | 6.07 | 3199 | 2328 | | 138 | 964 | 0.57 | 1020 | 0.61 | |
| | | 5.890 | | | | | | | 3.06 | 6.67 | 4000 | 2307 | | 80 | 955 | 0.33 | 1010 | 0.35 | |
| | | 5.973 | | | | | | | 3.34 | 7.27 | 4001 | 2027 | | 294 | 839 | 1.22 | 888 | 1.29 | |
| E-W | 3.221 | — | | | F | 7.48 | 1445 | — | — | — | 4002 | — | — | — | — | — | — | — | |
| E-W | 3.259 | — | | | G | 10.00 | 1.931 | — | — | — | 4003 | — | — | — | — | — | — | — | |
| | | 5.696 | | | | | | E | 2.42 | 5.26 | 4004 | 2349 | | 189 | 972 | 0.78 | 1029 | 0.83 | |
| | | 5.505 | | | | | | | 1.78 | 3.87 | 4005 | 2266 | | 126 | 938 | 0.52 | 992 | 0.55 | |
| | | 5.437 | | | | | | | 1.55 | 3.38 | 4006 | 2086 | | 123 | 863 | 0.51 | 913 | 0.54 | |
| | | 5.308 | | | | | | | 1.12 | 2.45 | 4007 | 1477 | | 63.4 | 611 | 0.26 | 647 | 0.28 | |
| | | 4.560 | | | | | | W | 1.37 | 2.98 | 4008 | 1436 | | 36.1 | 574 | 0.15 | 639 | 0.16 | |
| | | 4.274 | | | | | | " | 2.32 | 5.06 | 4009 | 1440 | | 226 | 576 | 0.94 | 631 | 0.99 | |
| E-W | 3.326 | — | | | H | 14.44 | 2.789 | — | — | — | 4010 | — | — | — | — | — | — | — | |
| | | 4.361 | | | | | | W | 2.033 | 4.43 | 4011 | 2383 | | 163 | 986 | 0.68 | 1044 | 0.72 | |
| | | 4.241 | | | | | | | 7.67 | 1.67 | 4012 | 1241 | | 152 | 514 | 0.63 | 544 | 0.67 | |
| | | 4.966 | | | | | | | 0.17 | 0.04 | 4013 | 1408 | | 654 | 583 | 0.27 | 617 | 0.29 | |
| | | 5.475 | | | | | | E | 1.68 | 3.63 | 4014 | 2305 | | 118 | 954 | 0.49 | 1009 | 0.52 | |
| | | 5.605 | | | | | | " | 2.11 | 4.60 | 4015 | 2373 | | 167 | 962 | 0.69 | 1018 | 0.73 | |
| E-W | 3.512 | — | | | I | 26.75 | 5.166 | — | — | — | 4016 | — | — | — | — | — | — | — | |
| | | 4.972 | | | | | | E | 0 | 0 | 4017 | 1709 | | 872 | 707 | 0.36 | 749 | 0.38 | |
| | | 5.636 | | | | | | E | 2.22 | 4.83 | 4018 | 2063 | | 270 | 854 | 1.12 | 904 | 1.18 | |
| | | 5.461 | | | | | | | 1.63 | 3.56 | 4019 | 2379 | | 194 | 884 | 0.80 | 1041 | 0.85 | |
| | | 5.237 | | | | | | | 8.87 | 1.93 | 4020 | 2265 | | 187 | 837 | 0.77 | 992 | 0.82 | |
| | | 5.865 | | | | | | | 3.53 | 0.77 | 4021 | 1629 | | 74 | 674 | 0.31 | 714 | 0.32 | |
| | | 4.566 | | | | | | W | 1.35 | 2.94 | 4022 | 1596 | | 130 | 661 | 0.54 | 699 | 0.57 | |

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Table XVI. LV Log Sheet Model 1 (Continued).

| TYPE
TRAV. | POSITION (VOLTS) | | AXIAL
PLANE | AXIAL POSITION
X INS | RADIAL POSITION
LOC. | R.M.S.
R ₂ | HISTO
No. | U
FPS | U'
FPS | U _{1/2}
° | U _{1/2}
° | U _{1/2}
° | U _{1/2}
° |
|---------------|------------------|-------|----------------|-------------------------|-------------------------|--------------------------|--------------|----------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|
| | AXIAL | NS | | | | | | | | | | | |
| REF 3108 | 4.971 | 13381 | | | | | | | | | | | |
| 3.572 | 4.218 | 13381 | J | 26.75 | 5.166 | W | 2.51 | 546 | 4023 | 1949 | 255 | 807 | 106 |
| EW 3.699 | — | — | K | 39.14 | 7.559 | — | — | — | 4024 | — | — | — | — |
| | 4.965 | — | | | | W | .02 | .004 | 4025 | 1773 | 188 | 724 | .078 |
| | 4.229 | — | | | | | 2.473 | .538 | 4026 | 1642 | 196 | 1679 | .081 |
| | 4.560 | — | | | | | 1.37 | .298 | 4027 | 1649 | 164 | .682 | .068 |
| | 4.772 | — | | | | | .663 | .144 | 4028 | 1627 | 149 | .673 | .062 |
| | 5.123 | — | | | | E | .507 | .110 | 4029 | 2015 | 205 | .834 | .085 |
| | 5.338 | — | | | | | 1.223 | .266 | 4030 | 2179 | 208 | .902 | .086 |
| | 5.574 | — | | | | | 2.01 | .438 | 4031 | 1887 | 342 | .781 | .141 |
| E-W 3.886 | — | — | L | 51.52 | 9.950 | — | — | — | 4032 | — | — | — | — |
| | 5.709 | — | | | | E | 2.46 | .536 | 4033 | 1291 | 343 | .534 | .162 |
| | 5.622 | — | | | | | 2.17 | .472 | 4034 | 1443 | 398 | .597 | .165 |
| | 5.315 | — | | | | | 1.15 | .250 | 4035 | 1912 | 258 | .791 | .107 |
| | 4.955 | — | | | | W | .05 | .012 | 4036 | 1880 | 187 | .728 | .077 |
| | 4.621 | — | | | | | 1.167 | .254 | 4037 | 1747 | 178 | .723 | .074 |
| | 4.230 | — | | | | | 2.47 | .538 | 4038 | 1555 | 235 | .644 | .097 |
| E-W 4.197 | — | — | M | 72.12 | 13.920 | — | — | — | 4039 | — | — | — | — |
| | 3.967 | — | | | | W | 3.35 | .729 | 4040 | 1116 | 282 | .462 | .118 |
| | — | — | | | | | 1.67 | .364 | 4041 | 1436 | 292 | .594 | .121 |
| | — | — | | | | | .34 | .075 | 4042 | 1523 | 281 | .630 | .116 |
| | — | — | | | | E | .03 | .007 | 4043 | 1508 | 290 | .624 | .120 |
| | — | — | | | | | 1.74 | .378 | 4044 | 1197 | 329 | .495 | .136 |
| | — | — | | | | | 3.39 | .737 | 4045 | 859 | 265 | .352 | .110 |

Table XVI. LV Log Sheet Model 1 (Continued).

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MODEL 1 5.118 2416 FPS 1/2 2283 FPS
POINT 101 4.543 1636 FPS 1/2 DAK 1/23/78

| TYPE | POSITION (VOLTS) | AXIAL POSITION | RADIAL POSITION | HISTO | U | U' | U'' | U''' | U'''' | U''''' |
|-----------|------------------|----------------|-----------------|-------|------|-----|-----|------|-------|--------|
| TRAV. | AXIAL | PLANE X | LOC. R. | NO. | FPS | FPS | FPS | FPS | FPS | FPS |
| REF 3.108 | 4.971 | 13.381 | 15.301 | | | | | | | |
| E-W | 4.297 | 13.381 | 15.301 | 4046 | — | — | — | — | — | — |
| | 4.971 | | | 4047 | 1307 | 286 | 541 | 118 | 578 | 125 |
| | 5.902 | | | 4048 | 878 | 256 | 363 | 106 | 384 | 112 |
| | 5.218 | | | 4049 | 1252 | 291 | 518 | 121 | 548 | 128 |
| | 4.703 | | | 4050 | 1355 | 276 | 561 | 114 | 594 | 121 |
| | 4.064 | | | 4051 | 1082 | 264 | 448 | 110 | 474 | 116 |

Table XVI. LV Log Sheet Model 1 (Continued).

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| TYPE | POSITION (VOLTS) | | | AXIAL POSITION | | RADIAL POSITION | | HISTO | J | U' | D _{1/2} | U _{1/2} | V _{1/2} |
|-------|------------------|-------|--------|----------------|-------|-----------------|---------|--------|------|------|------------------|------------------|------------------|
| TRAV. | AXIAL | EW | NS | PLANE X MUS | DEG | LOC. | R. INS. | R. IN. | FPS | FPS | | | |
| REF | 3.108 | 4.854 | 13.384 | | | | | | | | | | |
| E-W | 3.224 | — | 13.384 | G | 7.68 | 1.483 | — | — | 5010 | — | — | — | — |
| | | 4.498 | | | | | W | 1.19 | 5041 | 1382 | 102 | — | .844 .062 |
| | | 5.231 | | | | | E | 1.26 | 5042 | 1376 | 118 | — | .841 .072 |
| E-W | 3.130 | — | | Y | 1.46 | 2.82 | — | — | 5043 | — | — | — | — |
| | | 4.029 | | | | | W | 2.75 | 5044 | 1506 | 80.9 | — | .921 .049 |
| | | 5.669 | | | | | E | 2.72 | 5045 | 1488 | 92.4 | — | .909 .057 |
| | | 4.854 | | | | | E | 0 | 0 | — | — | — | — |
| E-W | 3.291 | — | | H | 12.12 | 2.341 | — | — | 5046 | — | — | — | — |
| | | 5.058 | | | | | E | .68 | 5047 | 1307 | 99 | — | .799 .060 |
| | | 4.863 | | | | | " | .03 | 5048 | 1209 | 103 | — | .739 .062 |
| | | 4.687 | | | | | W | .56 | 5049 | 1299 | 77.3 | — | .794 .047 |
| E-W | 3.477 | — | | J | 24.44 | 4.720 | — | — | 5050 | — | — | — | — |
| | | 4.626 | | | | | W | .76 | 5051 | 1070 | 150. | — | .654 .091 |
| | | 4.744 | | | | | " | .38 | 5052 | 1212 | 93.8 | — | .741 .057 |
| | | 4.861 | | | | | E | .02 | 5053 | 1242 | 83.5 | — | .760 .051 |
| | | 4.974 | | | | | | .40 | 5054 | 1151 | 138 | — | .704 .084 |
| | | 5.097 | | | | | | .81 | 5055 | 944 | 187 | — | .527 .114 |
| E-W | 3.664 | — | | K | 36.82 | 7.111 | — | — | 5056 | — | — | — | — |

Table XVI. LV Log Sheet Model 1 (Continued).

| TYPE | POSITION (VOLTS) | | AXIAL POSITION | | RADIAL POSITION | | HISTO
No. | J
FPS | U'
FPS | V _{1/3}
° | V _{1/3}
% | V _{1/3}
% | V _{1/3}
% | Date |
|-----------|------------------|--------|------------------|-------|-----------------|-------|--------------|----------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|---------|
| | AXIAL | EW NS | PLANE X MS X Deg | LOC. | R. MS. P/2 | Loc. | | | | | | | | |
| REF 3.108 | 4.915 | 13.381 | | | | | | | | | | | | |
| AXIAL | — | 4.900 | 13.381 | — | — | 0 | 4052 | — | — | — | — | — | — | 1/23/78 |
| AXIAL | — | 5.317 | — | — | — | 1.34 | 4053 | — | — | — | — | — | — | |
| AXIAL | — | 5.724 | — | — | — | 2.86 | 4054 | — | — | — | — | — | — | |
| AXIAL | — | 5.937 | — | — | — | 3.41 | 4055 | — | — | — | — | — | — | |
| AXIAL | — | 6.226 | — | — | — | 4.37 | 4056 | — | — | — | — | — | — | |
| EW 3.131 | — | — | A 1.52 | 2.94 | — | — | 4058 | — | — | — | — | — | — | |
| | — | 3.815 | — | — | — | 3.67 | 4059 | 2386 | 23.6 | 983 | 0.97 | 1.041 | 1.03 | |
| | — | 6.052 | — | — | — | 3.79 | 4060 | 2388 | 22.8 | 988 | 0.94 | 1.089 | 1.00 | |
| | — | 6.101 | — | — | — | 3.95 | 4061 | 2385 | 24.6 | 983 | 1.01 | 1.041 | 1.07 | |
| | — | 6.167 | — | — | — | 4.17 | 4062 | 2387 | 12.2 | 984 | 0.50 | 1.042 | 0.53 | |
| | — | 6.210 | — | — | — | 4.32 | 4063 | 2389 | 14.2 | 964 | 0.59 | 1.021 | 0.62 | |
| EW 3.146 | — | — | B 2.52 | 4.87 | — | — | 4064 | — | — | — | — | — | — | |
| EW 3.161 | — | — | C 3.51 | 6.78 | — | — | 4065 | — | — | — | — | — | — | |
| | — | 8.328 | — | — | — | 11.38 | 4065A | 406 | 62.1 | — | — | — | — | |
| | — | 6.068 | — | — | — | 3.84 | 4066 | 2255 | 12.9 | 929 | 0.53 | 984 | 0.56 | |
| | — | 5.921 | — | — | — | 3.35 | 4067 | 2346 | 86.8 | 967 | 0.36 | 1.024 | 0.38 | |
| | — | 5.782 | — | — | — | 3.89 | 4068 | 1574 | 11.2 | 657 | 0.46 | 696 | 0.49 | |
| | — | 4.111 | — | — | — | 2.68 | 4069 | 1680 | 11.0 | 659 | 0.45 | 698 | 0.48 | |
| | — | 4.019 | — | — | — | 2.99 | 4070 | 1347 | 21.7 | 967 | 0.89 | 1.024 | 0.95 | |
| EW 3.176 | — | — | D 4.50 | 8.69 | — | — | 4071 | — | — | — | — | — | — | |
| EW 3.191 | — | — | E 5.50 | 10.62 | — | — | 4072 | — | — | — | — | — | — | |
| | — | 8.337 | — | — | — | 11.41 | 4073 | 404 | 62.1 | — | — | — | — | |
| | — | 5.975 | — | — | — | 2.48 | 4074 | 2028 | 23.1 | 836 | 0.95 | 885 | 1.01 | |
| | — | 5.850 | — | — | — | 1.2 | 4075 | 2258 | 64.3 | 930 | 0.26 | 886 | 0.28 | |
| | — | 5.755 | — | — | — | 2.80 | 4076 | 2232 | 69.1 | 920 | 0.28 | 974 | 0.3 | |

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Table XVI. LV Log Sheet Model 1 (Continued).

MODEL 1 Dog 5.178
POINT 103 R_i 4.573
V_i 242.7 FPS V_m 225.1 FPS
V_j 163.3 FPS V_{nk} 400 FPS Date 1/23/78

| TYPE | POSITION (VOLTS) | AXIAL | EW | NS | AXIAL PLANE X POS X DEG | RADIAL POSITION LOC. | R. MS. R/2 | HISTO NO. | U FPS | U' FPS | D/2 | D/2 | D/2 | D/2 | D/2 |
|-----------|------------------|--------|--------|-------------------------|-------------------------|----------------------|------------|-----------|--------|--------|-----|-----|-----|-----|-----|
| TRAV. | AXIAL | EW | NS | AXIAL PLANE X POS X DEG | RADIAL POSITION LOC. | R. MS. R/2 | HISTO NO. | U FPS | U' FPS | D/2 | D/2 | D/2 | D/2 | D/2 | D/2 |
| REF 3.108 | 4.915 | 13.381 | | | | | | | | | | | | | |
| | 3.191 | 5.619 | 13.381 | E | 5.50 | 1062 | | | | | | | | | |
| | | 4.262 | | | | | | | | | | | | | |
| | | 4.001 | | | | | | | | | | | | | |
| E-W | 3.221 | — | | F | 2.48 | 1.445 | | | | | | | | | |
| E-W | 3.259 | — | | G | 10.00 | 1.931 | | | | | | | | | |
| | | 8.302 | | | | | | | | | | | | | |
| | | 5.772 | | | | | | | | | | | | | |
| | | 5.650 | | | | | | | | | | | | | |
| | | 5.490 | | | | | | | | | | | | | |
| | | 5.226 | | | | | | | | | | | | | |
| | | 4.642 | | | | | | | | | | | | | |
| | | 4.235 | | | | | | | | | | | | | |
| F-W | 3.324 | — | | H | 18.30 | 2.762 | | | | | | | | | |
| | | 5.251 | | | | | | | | | | | | | |
| | | 5.596 | | | | | | | | | | | | | |
| | | 5.314 | | | | | | | | | | | | | |
| | | 4.929 | | | | | | | | | | | | | |
| | | 4.854 | | | | | | | | | | | | | |
| | | 4.579 | | | | | | | | | | | | | |
| | | 4.338 | | | | | | | | | | | | | |
| E-W | 3.512 | — | | J | 26.75 | 5.166 | | | | | | | | | |
| | | 8.326 | | | | | | | | | | | | | |
| | | 5.628 | | | | | | | | | | | | | |
| | | 5.447 | | | | | | | | | | | | | |
| | | 5.254 | | | | | | | | | | | | | |

MODEL 1 Deg 5.178
POINT 103 R₁ 4593

V₁ 2427 FPS V_M 2291 FPS
V₂ 1633 FPS V_M 400 FPS

Date 1/23/28

| TYPE | POSITION (VOLTS) | AXIAL PLANE | AXIAL POSITION X INS | AXIAL POSITION Y DEG | RADIAL POSITION LOC. | RADIAL POSITION R INS | RADIAL POSITION R ₂ | HISTO No. | U FPS | U' FPS | V ₁ % | V ₂ % | V ₁ V _M | V ₂ V _M |
|----------|------------------|-------------|----------------------|----------------------|----------------------|-----------------------|--------------------------------|-----------|-------|--------|------------------|------------------|-------------------------------|-------------------------------|
| REF 3108 | 4.915 | NS | 13381 | | | | | | | | | | | |
| | 3.572 | 4.907 | 13381 | J | 26.75 | 5.166 | | 5002 | 1488 | 74.8 | .613 | .031 | .649 | .033 |
| | | 4.261 | | | | | | 5003 | 1439 | 86.0 | .593 | .035 | .628 | .038 |
| | | 4.298 | | | | | | 5004 | 2160 | 929 | .890 | .094 | .943 | .100 |
| E-W | 3.699 | | | K | 39.14 | 7.559 | | 5005 | | | | | | |
| | | 4.904 | | | | | | 5006 | 1776 | 130 | .732 | .054 | .775 | .057 |
| | | 5.800 | | | | | | 5007 | 1344 | 358 | .554 | .182 | .587 | .156 |
| | | 5.591 | | | | | | 5008 | 2006 | 260 | .827 | .107 | .876 | .113 |
| | | 5.392 | | | | | | 5009 | 2236 | 238 | .821 | .088 | .976 | .104 |
| | | 5.177 | | | | | | 5010 | 2093 | 192 | .862 | .089 | .914 | .084 |
| | | 4.719 | | | | | | 5011 | 1720 | 137 | .709 | .056 | .751 | .060 |
| | | 4.352 | | | | | | 5012 | 1849 | 215 | .762 | .089 | .807 | .094 |
| E-W | 3.886 | | | L | 56.52 | 8.950 | | 5013 | | | | | | |
| | | 4.913 | | | | | | 5014 | 1714 | 156 | .706 | .064 | .748 | .068 |
| | | 4.423 | | | | | | 5015 | 1669 | 171 | .688 | .070 | .729 | .075 |
| | | 4.741 | | | | | | 5016 | 1680 | 145 | .692 | .060 | .733 | .063 |
| | | 5.325 | | | | | | 5017 | 1896 | 184 | .781 | .076 | .828 | .080 |
| | | 5.747 | | | | | | 5018 | 1410 | 340 | .581 | .140 | .615 | .148 |
| | | 6.240 | | | | | | 5019 | 713 | 183 | .294 | .075 | .311 | .080 |
| | | 8.637 | | | | | | 5020 | 408 | 23.5 | | | | |
| E-W | 4.197 | | | M | 72.12 | 13.928 | | 5021 | | | | | | |
| | | 8.637 | | | | | | 5022 | 400 | 28.3 | | | | |
| | | 6.236 | | | | | | 5023 | 771 | 201 | .318 | .083 | .334 | .088 |
| | | 4.912 | | | | | | 5024 | 1701 | 184 | .701 | .076 | .742 | .080 |
| | | 5.546 | | | | | | 5025 | 1350 | 277 | .556 | .114 | .589 | .121 |
| | | 4.260 | | | | | | 5026 | 1483 | 232 | .611 | .096 | .647 | .111 |

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Table XVI. LV Log Sheet Model 1 (Continued).

MODEL 1 Dog 5.128 V_i 2427 FPS V_m 2291 FPS
 POINT 103 R_i 4.573 V_j 1633 FPS V_{h/c} 400 FPS Date 1/23/28

Table XVI. LV Log Sheet Model 1 (Continued). ORIGINAL PAGE IS OF POOR QUALITY

| TYPE | POSITION (VOLTS) | | AXIAL POSITION | | RADIAL POSITION | | HISTO
No. | U
FPS | U'
FPS | U _{1/2}
% | U _{1/3}
% | U _{1/4}
% | U _{1/5}
% |
|-------|------------------|-------|----------------|-------|-----------------|--------|--------------|----------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|
| | AXIAL | NS | PLANE | X INS | Y DEG | LOC. | | | | | | | |
| TRAV. | REF 3.108 | 4.915 | 13.381 | | | | | | | | | | |
| | 4.187 | 4.605 | 13.381 | M | 72.12 | 18.528 | W | 181 | 5027 | 1695 | 171 | 699 | 0.70 |
| E-W | 4.297 | — | — | N | 78.74 | 15.206 | — | — | 5028 | — | — | — | — |
| | — | 4.823 | — | — | — | — | E | 0 | 5029 | 1616 | 206 | 666 | 0.85 |
| | — | 4.309 | — | — | — | — | W | 2.02 | 5030 | 1610 | 245 | 663 | 1.01 |
| | — | 4.194 | — | — | — | — | " | 2.80 | 5031 | 1365 | 24.5 | 562 | 0.10 |
| | — | 5.595 | — | — | — | — | E | 2.27 | 5032 | 1203 | 270 | 496 | 1.11 |
| | — | 6.320 | — | — | — | — | " | 4.68 | 5033 | 712 | 179 | 293 | 0.74 |
| E-W | 3.131 | — | — | A | 152 | 2.94 | — | — | 5034 | — | — | — | — |
| N-S | — | 6.102 | — | — | — | — | E | 3.957 | 5035 | — | — | — | — |
| N-S | — | 3.759 | — | — | — | — | W | 3.853 | 5036 | — | — | — | — |
| E-W | 3.161 | — | 13.381 | C | 3.57 | 6.78 | — | — | 5037 | — | — | — | — |
| N-S | — | 3.929 | — | — | — | — | W | 3.287 | 5038 | — | — | — | — |
| N-S | — | 5.919 | — | — | — | — | E | 3.347 | 5039 | — | — | — | — |

Table XVI. LV Log Sheet Model 1 (Continued).

MODEL 1 Deg 5.178 V_i 1447 FPS V_m 1348 FPS
POINT 1505 R_i 4.593 V_i 898 FPS V_m 0 FPS Date 1/23/78

| TYPE | POSITION (VOLTS) | AXIAL POSITION | RADIAL POSITION | HISTO | U | U' | D _{1/2} | D _{1/2} | D _{1/2} | D _{1/2} | D _{1/2} |
|-------|------------------|------------------|------------------------------|-------|------|-----|------------------|------------------|------------------|------------------|------------------|
| TRAV. | AXIAL | PLANE X MS X DEG | LOC. R. MS. R _{1/2} | No. | FPS. | FPS | | | | | |
| REF | 3.103 | | | | | | | | | | |
| E-W | 3.126 | A 152, 294 | — | 5057A | — | — | — | — | — | — | — |
| | | | E 395 | 5058A | 1423 | 735 | 983 | .051 | 1056 | .055 | |
| | | | " 372 | 5059A | 1430 | 397 | 988 | .027 | 1061 | .029 | |
| | | | W 376 | 5060A | 1405 | 407 | 971 | .028 | 1042 | .030 | |
| | | | " 407 | 5061A | 1414 | 825 | 977 | .057 | 1049 | .061 | |
| AXIAL | — | | E 0 | 5062A | — | — | — | — | — | — | |
| AXIAL | — | | E 395 | 5063A | — | — | — | — | — | — | |
| E-W | 3.156 | C 351, 678 | — | 5064A | — | — | — | — | — | — | |
| | | | W 337 | 5065A | 1393 | 103 | 963 | .071 | 1033 | .076 | |
| | | | " 285 | 5066A | 299 | 505 | 621 | .035 | 667 | .037 | |
| | | | E 325 | 5067A | 1420 | 664 | 981 | .046 | 1053 | .049 | |
| | | | " 274 | 5068 | 870 | 506 | 601 | .035 | 645 | .038 | |
| | | | 354 | 5069 | 1338 | 158 | 925 | .109 | 993 | .117 | |
| AXIAL | — | | Y 269 | 5070 | — | — | — | — | — | — | |
| E-W | 3.186 | E 550, 1062 | — | 5071 | — | — | — | — | — | — | |
| | | | E 237 | 5072 | 930 | 725 | 643 | .054 | 690 | .057 | |
| | | | " 286 | 5073 | 1392 | 102 | 962 | .070 | 1033 | .076 | |
| | | | Y 354 | 5074 | 891 | 246 | 615 | .170 | 661 | .182 | |
| | | | Y 399 | 5075 | 510 | 187 | 352 | .129 | 378 | .139 | |
| | | | W 303 | 5076 | 1304 | 158 | 901 | .109 | 967 | .117 | |
| E-W | 3.321 | H 1444, 2789 | — | 5077 | — | — | — | — | — | — | |
| | | | E 0 | 5078 | 728 | 74 | 503 | .051 | 540 | .053 | |
| | | | E 335 | 5079 | 606 | 144 | 419 | .113 | 450 | .122 | |
| | | | " 189 | 5080 | 1253 | 131 | 866 | .091 | 930 | .097 | |
| | | | Y 97 | 5081 | 1008 | 993 | 697 | .069 | 748 | .074 | |

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Table XVI. LV Log Sheet Model 1 (Continued).

| TYPE
TRAN. | POSITION (VOLTS) | | AXIAL
PLANE X
MIS X DEG | RADIAL POSITION
R. INS.
R. L. | | HISTO
NO. | J
FPS | U'
FPS | D _{1/2} ' | D _{1/2} ° | D _{1/2} ° | D _{1/2} ' | D _{1/2} ' |
|---------------|------------------|--------|-------------------------------|-------------------------------------|-------|--------------|----------|-----------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | AXIAL | EW | NS | | | | | | | | | | |
| REF 3/103 | 4.566 | 13.387 | | | | | | | | | | | |
| | 3.321 | 4.696 | 13.387 | H | 14.44 | 2.789 | | | | | | | |
| | | 4.463 | | | | | | | | | | | |
| | | 4.084 | | | | | | | | | | | |
| E-W | 3.694 | | | K | 39.14 | 7.559 | | | | | | | |
| | | 3.824 | | | | | | | | | | | |
| | | 4.945 | | | | | | | | | | | |
| | | 4.399 | | | | | | | | | | | |
| | | 5.121 | | | | | | | | | | | |
| | | 5.665 | | | | | | | | | | | |
| | | 6.246 | | | | | | | | | | | |
| E-W | 4.192 | | | M | 72.12 | 13.928 | | | | | | | |
| | | 6.367 | | | | | | | | | | | |
| | | 5.696 | | | | | | | | | | | |
| | | 4.960 | | | | | | | | | | | |
| | | 4.202 | | | | | | | | | | | |
| | | 3.503 | | | | | | | | | | | |
| E-W | 3.507 | | | J | 26.75 | 5.166 | | | | | | | |
| | | 4.026 | | | | | | | | | | | |
| | | 4.381 | | | | | | | | | | | |
| | | 4.801 | | | | | | | | | | | |
| | | 5.384 | | | | | | | | | | | |
| | | 5.717 | | | | | | | | | | | |

V₁ = 1447 FPS V_M = 1348 FPS

POINT 1505

DATE 1/23/68

5.118

0 FPS

898 FPS V_{M/C}

4.593

DATE 1/23/68

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OF POOR QUALITY

Table XVI. LV Log Sheet Model 1 (Continued).

MODEL 1 Deg 5.128 V_i 1453 FPS V_m 1355 FPS
POINT 1506 R_i 4.593 V_j 899 FPS V_{h/c} 400 FPS Date 1/23/79

| TYPE | POSITION (VOLTS) | AXIAL | EW | NS | AXIAL POSITION
PLANE X MS X DEG | RADIAL POSITION
LOC. R.M.S. R/L | HISTO
No. | U
FPS | U'
FPS | U _{1/2}
° | U _{1/3}
° | U _{1/4}
° | U _{1/5}
° |
|-------|------------------|-------|--------|----|------------------------------------|------------------------------------|--------------|----------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|
| REF | 3.103 | 4.955 | 13.387 | | | | | | | | | | |
| E-W | 3.126 | — | 13.387 | A | 152.294 | — | 5104 | — | — | — | — | — | — |
| | | 8.661 | | | | E | 5105 | 398 | 10.4 | — | — | — | — |
| | | 3.688 | | | | W | 5106 | 1361 | 111 | 937 | 0.76 | 1004 | 0.82 |
| | | 3.794 | | | | " | 5107 | 1388 | 322 | 955 | 0.26 | 1024 | 0.27 |
| | | 6.121 | | | | E | 5108 | 1403 | 524 | 966 | 0.35 | 1035 | 0.38 |
| | | 6.030 | | | | | 5109 | 1388 | 419 | 955 | 0.29 | 1024 | 0.31 |
| AXIAL | — | 6.121 | | | | | 5110 | — | — | — | — | — | — |
| AXIAL | — | 4.855 | | | | E | 5111 | — | — | — | — | — | — |
| E-W | 3.156 | — | | C | 351.698 | — | 5112 | — | — | — | — | — | — |
| | | 5.745 | | | | E | 5113 | 787 | 405 | 542 | 0.28 | 581 | 0.30 |
| | | 5.852 | | | | | 5114 | 1334 | 651 | 948 | 0.45 | 985 | 0.48 |
| | | 5.962 | | | | | 5115 | 1365 | 917 | 939 | 0.63 | 1007 | 0.68 |
| | | 4.089 | | | | W | 5116 | 798 | 612 | 549 | 0.42 | 589 | 0.45 |
| | | 3.896 | | | | " | 5117 | 1305 | 148 | 898 | 0.2 | 963 | 0.09 |
| AXIAL | — | 5.745 | | | | E | 5118 | — | — | — | — | — | — |
| E-W | 3.184 | — | | E | 563.1087 | — | 5119 | — | — | — | — | — | — |
| | | 5.669 | | | | E | 5120 | 857 | 564 | 590 | 0.39 | 632 | 0.42 |
| | | 5.737 | | | | | 5121 | 1280 | 103 | 881 | 0.71 | 945 | 0.76 |
| | | 5.888 | | | | | 5122 | 1362 | 911 | 937 | 0.63 | 1005 | 0.67 |
| | | 6.025 | | | | | 5123 | 837 | 222 | 576 | 0.153 | 618 | 0.164 |
| | | 4.022 | | | | W | 5124 | 1343 | 924 | 924 | 0.64 | 991 | 0.68 |
| | | 4.042 | | | | " | 5125 | 1361 | 74 | 937 | 0.57 | 1004 | 0.54 |
| E-W | 3.323 | — | | H | 1457.284 | — | 5126 | — | — | — | — | — | — |
| | | 4.403 | | | | W | 5127 | 1254 | 110 | 863 | 0.76 | 925 | 0.81 |
| | | 4.921 | | | | " | 5128 | 700 | 523 | 481 | 0.39 | 517 | 0.43 |

Table XVI. LV Log Sheet Model 1 (Continued).

MODEL 1

3

400 51.3

747

MODEL 1 Deg 5.178 V_i 0 FPS V_m 1104 FPS
 POINT 113A R_i 4.593 V_j 1104 FPS V_{dc} 0 FPS Date 1/23/78

Table XVI: LV Log Sheet Model 1 (Continued).

ORIGINAL PAGE IS
OF POOR QUALITY

| TYPE
TRAV. | POSITION (VOLTS) | | AXIAL POSITION | | RADIAL POSITION | | HISTO
No. | U
FPS | U'
FPS | D _{1/2}
% | D _{1/2}
% | V _{1/2}
% | V _{1/2}
% |
|---------------|------------------|--------|----------------|---------------|-----------------|------|-----------------|----------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|
| | AXIAL | EW | NS | PLANE
X MS | Y Deg | LOC. | R _{ms} | | | | | | |
| REF → 3108 | 4.854 | 13.384 | | | | | | | | | | | |
| E-W | 3.127 | — | 13.384 | Y | 126 | 243 | — | — | — | — | — | — | — |
| | | 5.667 | | | | | E | 2.71 | 590 | 994 | 52.3 | — | 900.047 |
| | | 4.009 | | | | | W | 2.82 | 614 | 907 | 12.9 | — | 822.117 |
| E-W | 3.224 | — | | G | 768 | 1483 | — | — | — | — | — | — | — |
| | | 4.565 | | | | | W | .96 | 209 | 680 | 52.6 | — | 616.048 |
| | | 5.138 | | | | | E | .95 | 207 | 665 | 50.4 | — | 602.046 |
| E-W | 3.291 | — | | H | 1212 | 2341 | — | — | — | — | — | — | — |
| | | 5.015 | | | | | E | .54 | 118 | 658 | 52.3 | — | 596.047 |
| | | 4.704 | | | | | W | .50 | 109 | 641 | 45.8 | — | 581.041 |
| E-W | 3.477 | — | | J | 2444 | 4720 | — | — | — | — | — | — | — |
| E-W | 3.664 | — | | K | 3682 | 2111 | — | — | — | — | — | — | — |

Table XVI. LV Log Sheet Model 1 (Continued).

MODE L 1 Deg 5.128 V_i 2.175 FPS V_m 2051 FPS
POINT 116 R_i 4593 V_i 1348 FPS V_m 0 FPS Date 1/20/78

| TYPE | POSITION (VOLTS) | AXIAL PLANE | AXIAL POSITION X MUS/DEG | RADIAL POSITION LOC. | R _{ms} R _i | HISTO No. | U FPS | U' FPS | U _{1/3} | U _{1/3} | U _{1/2} |
|-------|------------------|-------------|--------------------------|----------------------|--------------------------------|-----------|-------|--------|------------------|------------------|------------------|
| REF | 3.107 | 4.986 | 13380 | | | | | | | | |
| AXIAL | — | 6.262 | — | E | 4.25 | 3071 | — | — | — | — | — |
| AXIAL | — | 6.041 | — | " | 3.52 | 3072 | — | — | — | — | — |
| | | 4.924 | NEW E-W REF | | | | | | | | |
| AXIAL | — | 5.762 | 13380 | E | 2.19 | 3075 | — | — | — | — | — |
| AXIAL | — | 4.924 | — | E | 0 | 3077 | — | — | — | — | — |
| AXIAL | — | 5.341 | — | E | 1.39 | 3078 | — | — | — | — | — |
| E-W | 3.130 | — | A 1.52 294 | — | — | 3079 | — | — | — | — | — |
| | | 3.704 | — | W | 4.05 | 3080 | 2078 | 24.0 | 955 | 0.41 | 1.013 |
| | | 3.794 | — | V | 3.77 | 3081 | 2084 | 60.2 | 940 | 0.28 | 997 |
| N-S | — | " | — | V | " | 3082 | — | — | — | — | — |
| | | 6.041 | 13.380 | E | 3.72 | 3083 | 2074 | 46.0 | 954 | 0.21 | 1.011 |
| | | 6.091 | " | — | 3.84 | 3084 | 2089 | 44.2 | 965 | 0.20 | 1.023 |
| N-S | — | " | — | — | " | 3085 | — | — | — | — | — |
| | | 6.165 | 13380 | V | 4.14 | 3085A | 2120 | 50.0 | 975 | 0.23 | 1.034 |
| E-W | 3.145 | — | B 2.52 487 | — | — | 3086 | — | — | — | — | — |
| E-W | 3.160 | — | C 3.51 678 | — | — | 3087 | — | — | — | — | — |
| | | 4.101 | — | W | 2.74 | 3088 | 1335 | 12.8 | 614 | 0.59 | 651 |
| | | 3.935 | — | — | 3.30 | 3089 | 2087 | 56.7 | 964 | 0.26 | 1.022 |
| N-S | — | " | — | V | " | 3090 | — | — | — | — | — |
| | | 5.794 | 13380 | E | 2.87 | 3091 | 1310 | 90.8 | 602 | 0.42 | 639 |
| | | 5.849 | — | — | 3.25 | 3092 | 2079 | 55.2 | 956 | 0.25 | 1.014 |
| | | 5.972 | — | V | 3.19 | 3093 | 2082 | 48.8 | 957 | 0.22 | 1.015 |
| N-S | — | — | — | V | " | 3094 | — | — | — | — | — |
| | | 13.046 | — | SE | 3.66 | 3095 | 2081 | 75.8 | 957 | 0.35 | 1.015 |
| | | 13.264 | — | V | 3.51 | 3096 | 2081 | 50.6 | 957 | 0.23 | 1.015 |

Table XVI. LV Log Sheet Model 1 (Continued).

ORIGINAL PAGE 10
OF POOR QUALITY

| TYPE | POSITION (VOLTS) | | AXIAL POSITION | | RADIAL POSITION LOC. | RADIAL POSITION R./INCHES | HISTO No. | J FPS | U' FPS | U _{1/2} ° | U _{1/2} ° | U _{1/2} ° | U _{1/2} ° | | |
|-------|------------------|-------|----------------|----------------|----------------------|---------------------------|-----------|-------|--------|--------------------|--------------------|--------------------|--------------------|-------|------|
| | AXIAL | EW | NS | PLANE X INCHES | | | | | | | | | | | |
| TRAV. | REF 3.107 | 4.924 | 13.380 | | | | | | | | | | | | |
| | 3.160 | 5.972 | 13.822 | C | 3.51 | 6.78 | NE | 3.79 | 8.25 | 3097 | 2062 | 944 | 0.43 | 1.005 | 0.46 |
| | | " | 13.647 | | | | | 3.61 | 9.85 | 3098 | 2083 | 549 | 0.25 | 1.016 | 0.27 |
| | | 6.044 | 13.440 | | | | | 3.51 | 7.64 | 3099 | 2070 | 115 | 0.53 | 1.009 | 0.56 |
| | Y | " | 13.380 | | | | E | 3.73 | 8.12 | 3100 | 2050 | 105 | 0.48 | 1.000 | 0.51 |
| E-W | 3.175 | — | | D | 4.50 | 8.69 | — | — | — | — | — | — | — | — | — |
| E-W | 3.190 | — | | E | 5.50 | 10.62 | — | — | — | — | — | — | — | — | — |
| | | 4.003 | | | | | W | 3.07 | 6.68 | 3103 | 2047 | 140 | 0.64 | 0.998 | 0.68 |
| | | 4.219 | | | | | " | 2.35 | 5.72 | 3104 | 1342 | 79.3 | 0.36 | 0.654 | 0.39 |
| | | 5.634 | | | | | E | 2.36 | 5.15 | 3105 | 1260 | 38.1 | 0.18 | 0.614 | 0.19 |
| | | 5.670 | | | | | | 2.49 | 5.41 | 3106 | 1356 | 72.4 | 0.23 | 0.661 | 0.35 |
| | | 5.766 | | | | | | 2.81 | 6.11 | 3107 | 2056 | 62.2 | 0.29 | 1.022 | 0.30 |
| | | 5.727 | | | | | | 3.34 | 7.29 | 3108 | 2093 | 86 | 0.62 | 1.020 | 0.43 |
| | Y | 5.839 | | | | | Y | 3.05 | 6.64 | 3109 | 2120 | 52.2 | 0.75 | 1.034 | 0.25 |
| E-W | 3.220 | — | | F | 7.48 | 14.45 | — | — | — | — | — | — | — | — | — |
| E-W | 3.258 | — | | G | 10.00 | 19.31 | — | — | — | — | — | — | — | — | — |
| | | 4.318 | | | | | W | 2.02 | 4.40 | 3112 | 2093 | 72.7 | 0.62 | 1.020 | 0.35 |
| | | 4.585 | | | | | " | 1.13 | 2.46 | 3113 | 1189 | 66 | 0.57 | 0.580 | 0.33 |
| | | 5.279 | | | | | E | 1.18 | 2.58 | 3114 | 1094 | 72.4 | 0.503 | 0.533 | 0.35 |
| | | 5.365 | | | | | | 1.47 | 3.20 | 3115 | 1306 | 78.5 | 0.60 | 0.637 | 0.38 |
| | | 5.536 | | | | | | 2.04 | 4.44 | 3116 | 2021 | 69.9 | 0.29 | 0.985 | 0.34 |
| | Y | 5.632 | | | | | Y | 2.36 | 5.14 | 3117 | 2081 | 61.6 | 0.57 | 1.015 | 0.30 |
| E-W | 3.325 | — | | H | 14.44 | 27.89 | — | — | — | — | — | — | — | — | — |
| | | 5.700 | | | | | E | 2.59 | 5.63 | 3120 | 1870 | 205 | 0.60 | 0.912 | 1.00 |
| | | 5.552 | | | | | | 2.09 | 4.56 | 3121 | 2088 | 73.9 | 0.34 | 1.018 | 0.36 |
| | Y | 5.244 | | | | | Y | 1.07 | 2.32 | 3122 | 1358 | 148 | 0.24 | 0.662 | 0.32 |

1100 F L 1 Deg 5.178
 POINT 116 R₁ 4.543 V₁ 13.48 FPS V_{1/2} 0 FPS
 V₁ 2.175 FPS V_{1/2} 2.051 FPS
 Date 1/20/78

MODEL 1 Deg 5.117 V_i 2175 FPS V_m 2051 FPS
 POINT 116 R_i 4.593 V_j 1348 FPS V_{nk} 0 FPS Date 1/20/58

Table XVI. LV Log Sheet Model 1 (Continued).

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OF POOR QUALITY

| TYPE | POSITION (VOLTS) | AXIAL PLANE | AXIAL POSITION X INS | POSITION Y/DEG | RADIAL POSITION LOC. | R INS. | R/R ₂ | HISTO No. | U FPS | U' FPS | U _{1/2} ° | U _{1/2} ° | U _{1/2} ° | U _{1/2} ° |
|-------|------------------|-------------|----------------------|----------------|----------------------|--------|------------------|-----------|-------|--------|--------------------|--------------------|--------------------|--------------------|
| TRAV. | AXIAL | EW | NS | | | | | | | | | | | |
| | REF 3.107 | 4.924 | 13.380 | | | | | | | | | | | |
| | 3.325 | 4.926 | 13.380 | H | 1444 | 2.789 | 0 | 3123 | 984 | 84.2 | .455 | .041 | .462 | .043 |
| | | 4.975 | | | | | E | 3124 | 996 | 99.3 | .458 | .046 | .486 | .048 |
| | | 4.916 | | | | | W | 3125 | 2101 | 95.4 | .966 | .044 | .1024 | .047 |
| EW | 3.571 | | | J | 26.75 | 5.166 | — | 3126 | — | — | — | — | — | — |
| | | 5.494 | | | | | E | 3127 | 1951 | 173 | .897 | .080 | .957 | .084 |
| | | 5.885 | | | | | " | 3128 | 984 | 299 | .454 | .137 | .482 | .146 |
| | | 4.930 | | | | | E | 3129 | 1214 | 138 | .558 | .063 | .592 | .067 |
| | | 4.883 | | | | | W | 3130 | 1205 | 125 | .554 | .057 | .588 | .061 |
| | | 5.195 | | | | | E | 3131 | 1545 | 255 | .710 | .117 | .753 | .124 |
| | | 4.412 | | | | | W | 3132 | 1819 | 204 | .836 | .094 | .887 | .099 |
| EW | 3.698 | | | K | 3814 | 7.559 | — | 3133 | — | — | — | — | — | — |
| | | 4.080 | | | | | W | 3134 | 1044 | 305 | .480 | .140 | .509 | .149 |
| | | 4.413 | | | | | " | 3135 | 1442 | 227 | .663 | .104 | .703 | .111 |
| | | 4.926 | | | | | E | 3136 | 1491 | 175 | .686 | .080 | .727 | .085 |
| | | 5.411 | | | | | E | 3137 | 1654 | 279 | .760 | .128 | .806 | .136 |
| | | 5.764 | | | | | " | 3138 | 1162 | 333 | .534 | .153 | .567 | .162 |
| E-W | 3.865 | | | L | 5152 | 9.950 | — | 3139 | — | — | — | — | — | — |
| | | 3.930 | | | | | W | 3140 | 888 | 254 | .408 | .117 | .433 | .124 |
| | | 4.437 | | | | | " | 3141 | 1245 | 245 | .572 | .113 | .607 | .119 |
| | | 4.922 | | | | | E | 3142 | 1495 | 183 | .687 | .084 | .729 | .089 |
| | | 5.053 | | | | | E | 3143 | 1486 | 188 | .683 | .086 | .725 | .092 |
| | | 5.536 | | | | | | 3144 | 1241 | 265 | .571 | .122 | .605 | .129 |
| | | 6.046 | | | | | | 3145 | 792 | 241 | .364 | .111 | .386 | .118 |
| E-W | 4.196 | | | M | 7212 | 13.928 | — | 3146 | — | — | — | — | — | — |
| | | 3.730 | | | | | W | 3147 | 707 | 212 | .325 | .097 | .345 | .103 |

Table XVI. LV Log Sheet Model 1 (Continued).

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OF POOR QUALITY

MODEL 1 Deg 5.17P 2175 FPS V₁ 2051 FPS
 POINT 116 R₁ 4.593 V₂ 1348 FPS V₂ 0 FPS Date 1/20/58

| TYPE | POSITION (VOLTS) | AXIAL | EW | NS | AXIAL PLANE X MS/DEG | AXIAL POSITION | RADIAL POSITION | HISTO No. | U | U' FPS | D _{1/2} | V _{1/2} | D _{1/2} | V _{1/2} |
|-------|------------------|-------|-------|-------|----------------------|----------------|-----------------|-----------|------|--------|------------------|------------------|------------------|------------------|
| TRAV. | | | | | | | | | | | | | | |
| | REF 3.107 | | 4.924 | 13380 | | | | | | | | | | |
| | 4.196 | | 4.316 | 13380 | M | 72.12 | 13.928 | 441 | 903 | 220 | 415 | 101 | 440 | 107 |
| | | | 4.937 | | | | | 009 | 1040 | 229 | 478 | 105 | 507 | 112 |
| | | | 5.570 | | | | | 425 | 892 | 232 | 410 | 107 | 435 | 113 |
| | | Y | 6.136 | | Y | | Y | 880 | 679 | 209 | 312 | 096 | 331 | 102 |
| E-W | 4.296 | | | | N | 78.74 | 15.206 | | | | | | | |
| | | | 3.836 | | | | | 790 | 713 | 192 | 328 | 088 | 348 | 094 |
| | | | 4.393 | | | | | 385 | 855 | 204 | 393 | 094 | 417 | 099 |
| | | | 4.907 | | | | | 012 | 919 | 200 | 423 | 092 | 448 | 098 |
| | | | 5.471 | | | | | 397 | 835 | 202 | 384 | 083 | 407 | 098 |
| | | Y | 6.038 | Y | Y | | | 808 | 647 | 185 | 297 | 085 | 315 | 090 |
| N-S | 3.130 | | 6.089 | | A | 1.52 | 2.94 | | | | | | | |
| | | | | 13381 | | | | | | | | | | |
| | | | | | | | | 845 | 2092 | 712 | 962 | 033 | 1020 | 035 |
| | | | | 13380 | | | NE | 917 | 2097 | 586 | 964 | 027 | 1022 | 029 |
| | | Y | | 12913 | | | SE | 911 | 2104 | 556 | 967 | 026 | 1026 | 027 |
| N-S | | | 6.038 | | | | | | | | | | | |
| | | | | | | | | 371 | | | | | | |
| | | | | 12837 | | | SE | 413 | 2103 | 489 | 967 | 022 | 1052 | 024 |
| | | | | | | | | 808 | 2084 | 492 | 958 | 023 | 1016 | 024 |
| | | Y | | 14005 | Y | Y | NE | 426 | 2081 | 514 | 957 | 024 | 1015 | 025 |

MODEL 1 Dog 5.18 2050 FPS
 POINT 119H R_i 4573 V_i 2092 FPS V_j 2050 FPS
 V_j 2092 FPS V_k 0 FPS Date 1/23/79

Table XVI. LV Log Sheet Model 1 (Concluded).

ORIGINAL PAGE IS
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| TYPE | POSITION (VOLTS) | AXIAL PLANE X | AXIAL POSITION X | RADIAL POSITION LOC. | HISTO NO. | U' FPS | U _{1/2} | U _{1/3} | U _{1/4} | U _{1/5} |
|-------|------------------|---------------|------------------|----------------------|-----------|--------|------------------|------------------|------------------|------------------|
| TRAV. | AXIAL | NS | PLANE X | POSITION X | LOC. | NO. | U' FPS | U _{1/2} | U _{1/3} | U _{1/4} |
| EW | 3.104 | 4.895 | 13387 | | | | | | | |
| EW | 3.127 | — | 13387 | A | 1.52 | 297 | — | — | — | — |
| | | 6.121 | | | | | | | | |
| | | 3.64 | | | | | | | | |
| EW | 3.187 | — | | E | 5.5 | 1062 | — | — | — | — |
| | | 3.974 | | | | | | | | |
| | | 5.197 | | | | | | | | |
| | | 5.835 | | | | | | | | |
| | | 5.657 | | | | | | | | |
| EW | 3.322 | — | | H | 14.44 | 2789 | — | — | — | — |
| | | 4.655 | | | | | | | | |
| | | 5.402 | | | | | | | | |
| | | 5.675 | | | | | | | | |
| | | 5.167 | | | | | | | | |
| | | 4.423 | | | | | | | | |
| | | 4.365 | | | | | | | | |
| EW | 3.695 | — | | K | 39.14 | 7.559 | — | — | — | — |
| | | 5.002 | | | | | | | | |
| | | 5.928 | | | | | | | | |
| | | 5.105 | | | | | | | | |
| | | 4.509 | | | | | | | | |
| | | 3.903 | | | | | | | | |
| EW | 3.508 | — | | J | 26.75 | 5.166 | — | — | — | — |
| | | 5.276 | | | | | | | | |
| | | 4.422 | | | | | | | | |

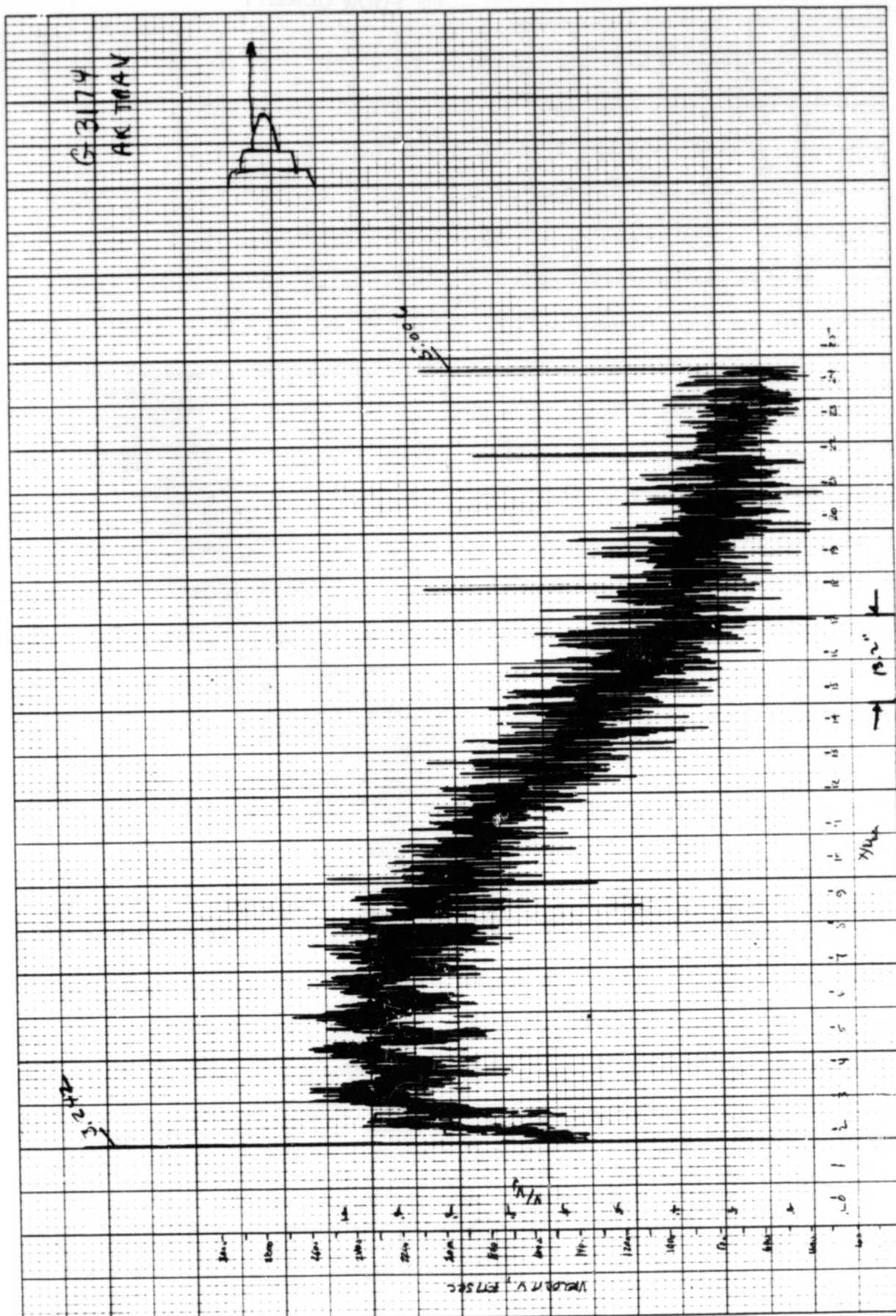
6.2.1.2 Laser Velocimeter (LV) Mean Velocity Traces for Model 1

Test point number and plume location is identified by matching the identifying Histo No. on each graph with that given in Table XVI.

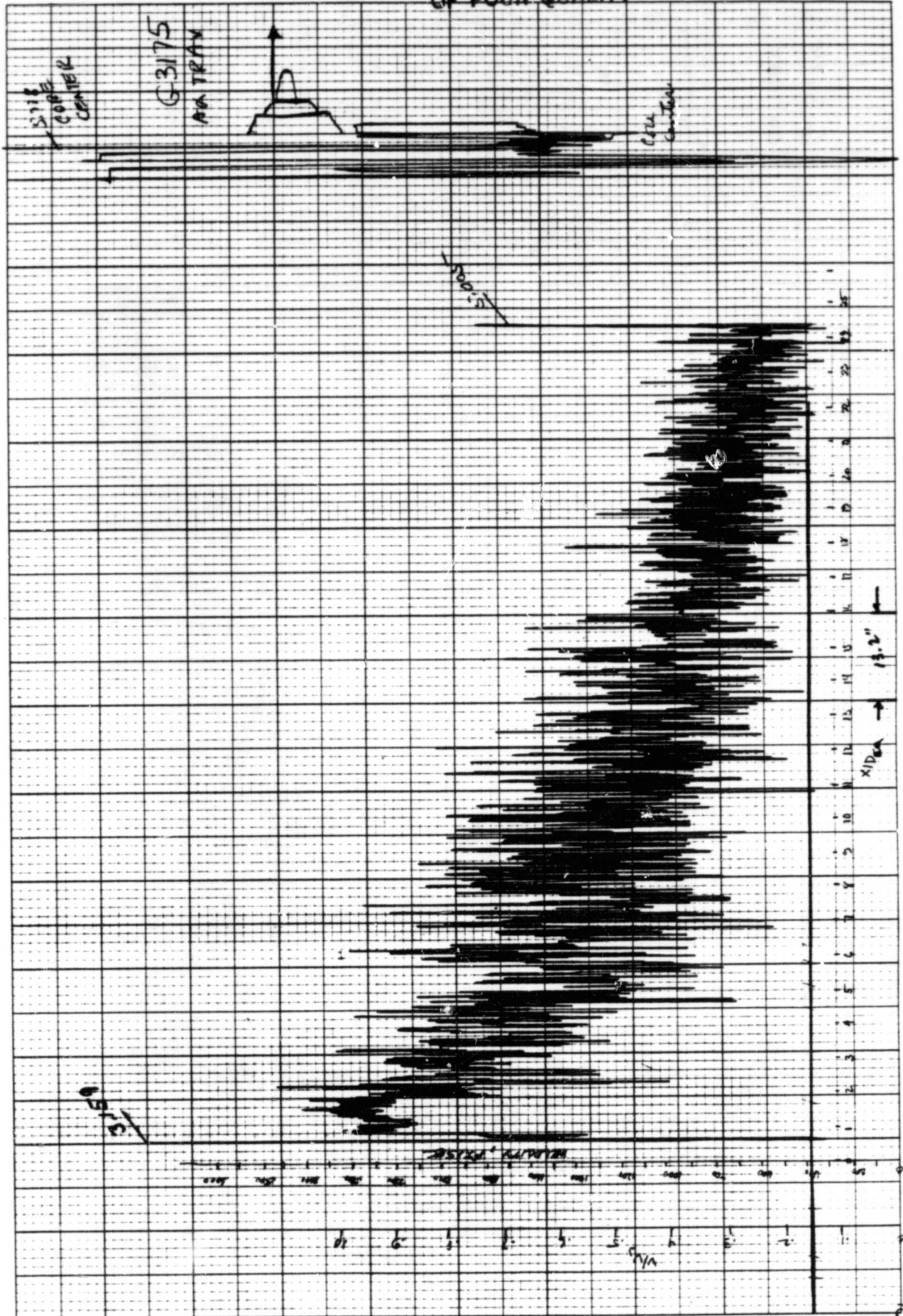
The velocity and physical position information is identified with handwritten scales on the ordinate and abscissa.

ORIGINAL PAGE IS
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MODEL 1
TEST POINT 101



ORIGINAL PAGE IS
OF POOR QUALITY



2.3V

5.02V

5.02V

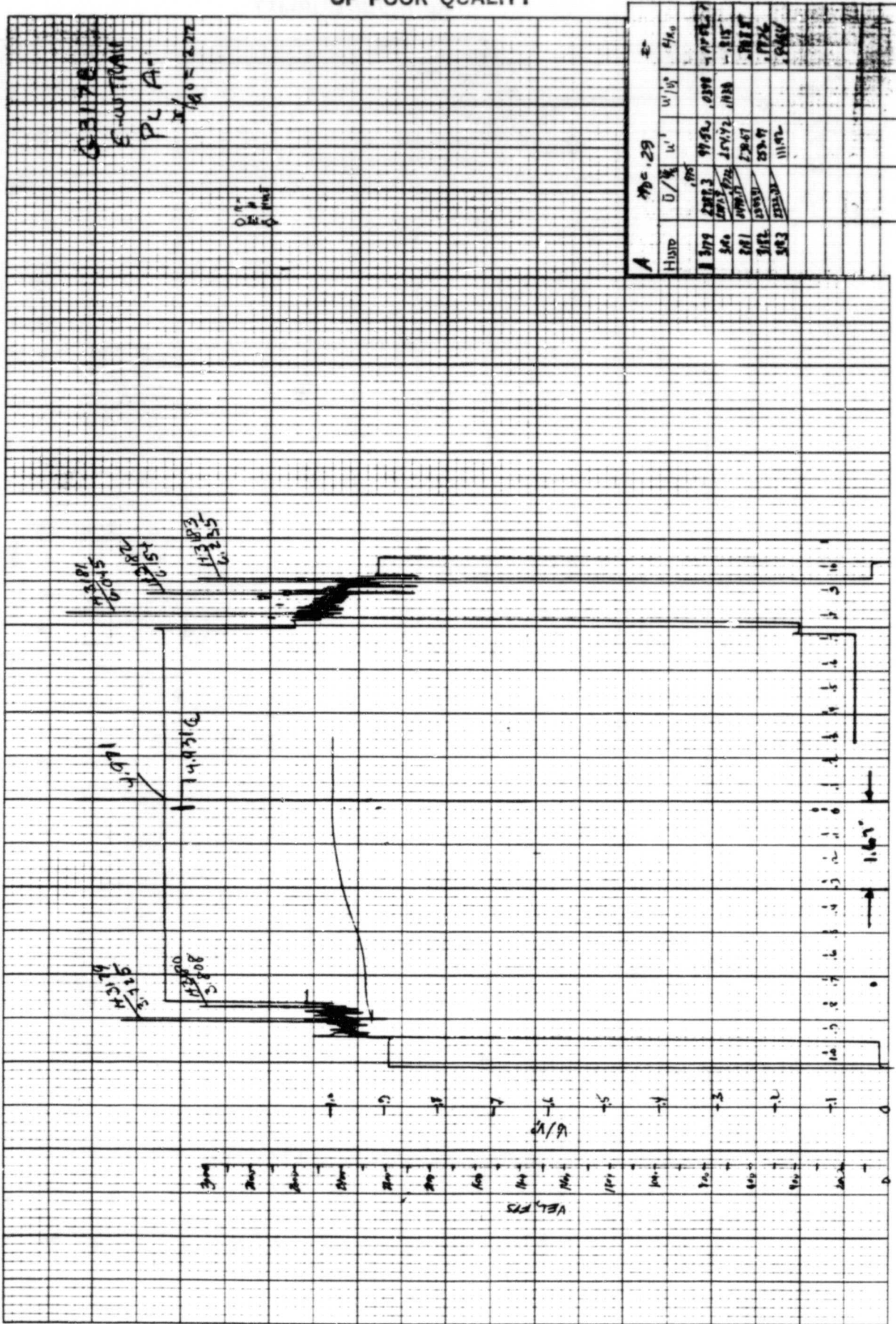
1.3V

VOLTAGE

TIME

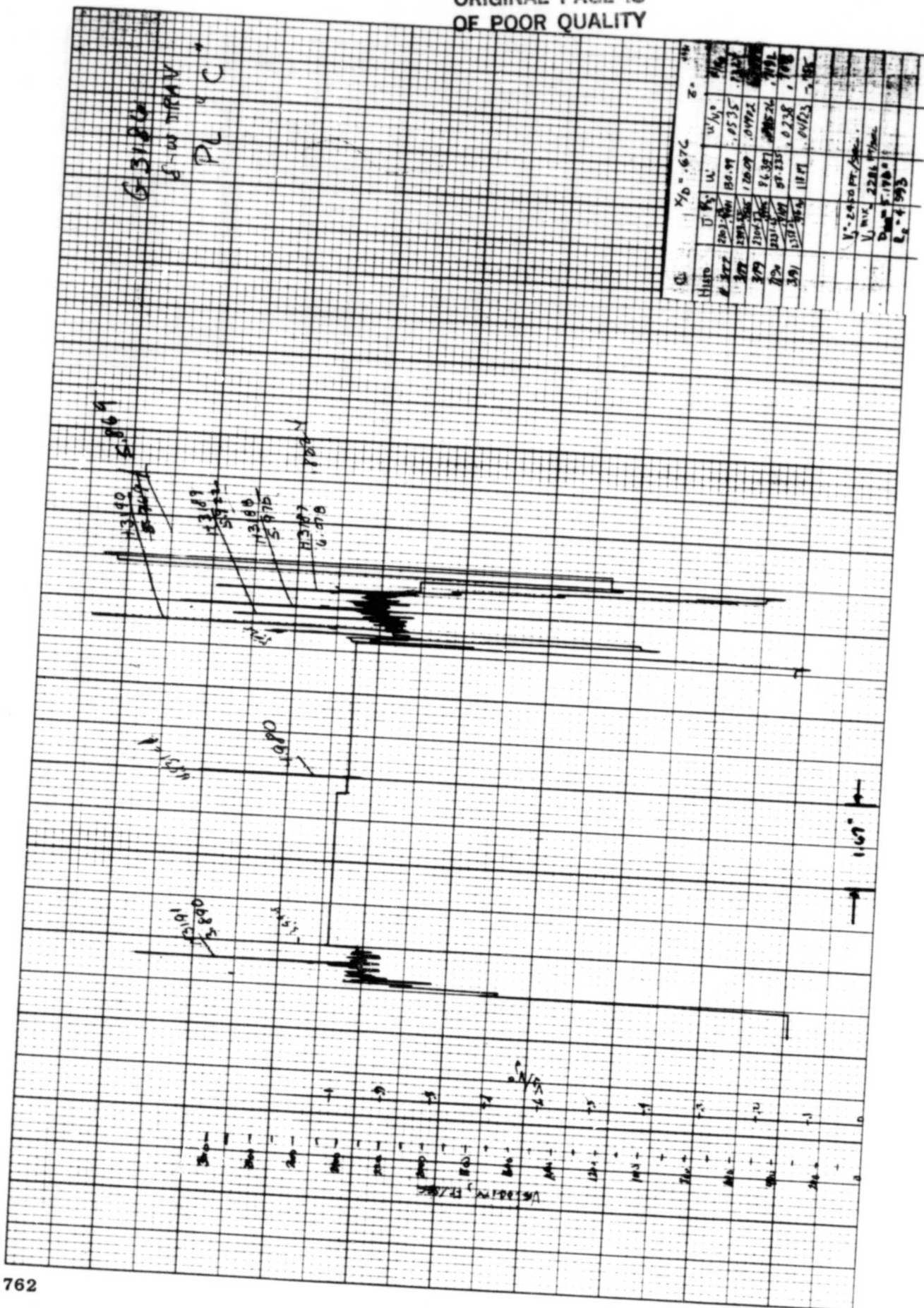
Hand-drawn sketch on graph paper. The sketch features a waveform consisting of several horizontal lines with some vertical spikes, labeled "310" at the top. To the right of the waveform, there is a vertical axis with labels "100" and "500". Below the waveform, there is a horizontal axis with labels "310" and "100". The entire sketch is on a grid background.

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OF POOR QUALITY

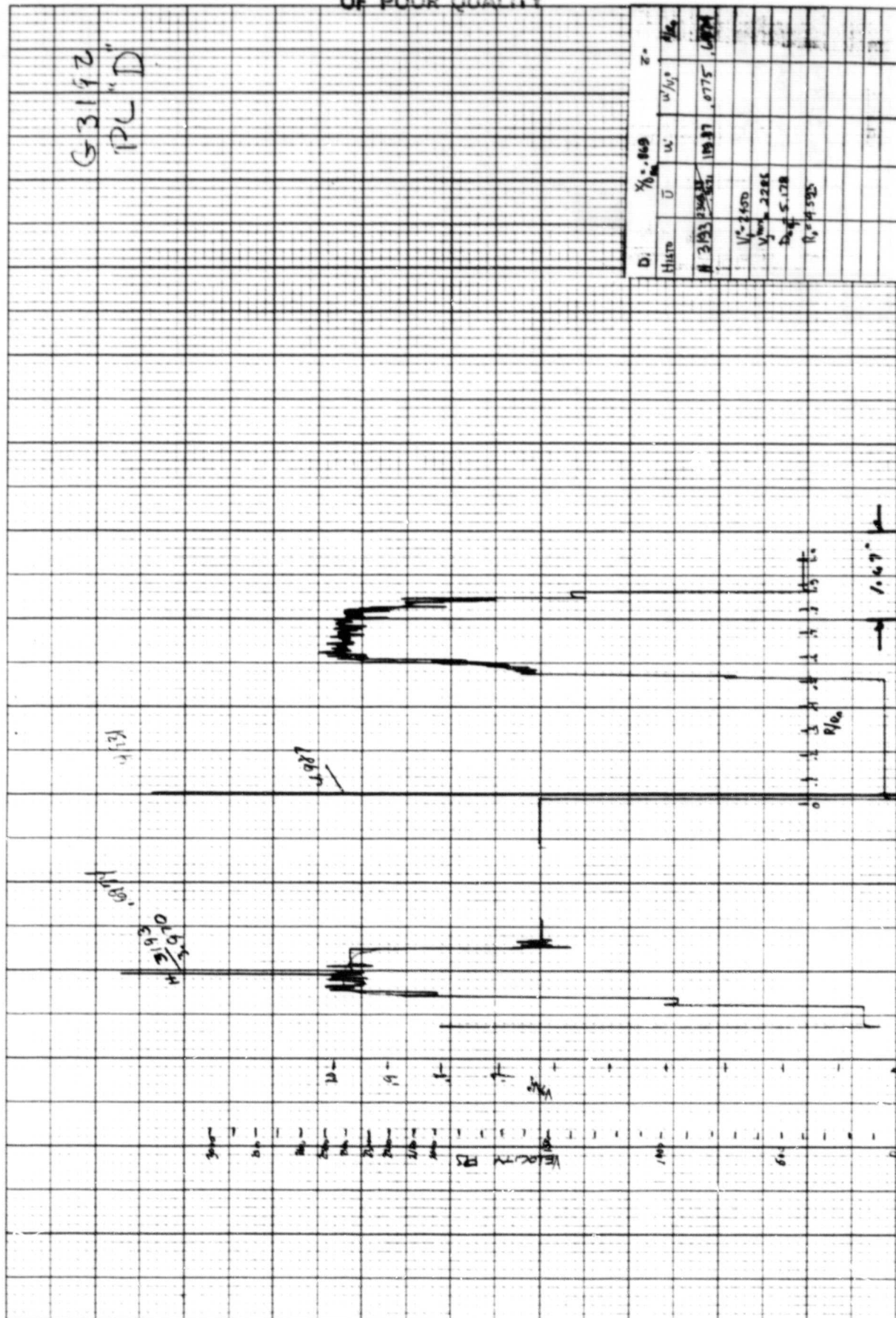


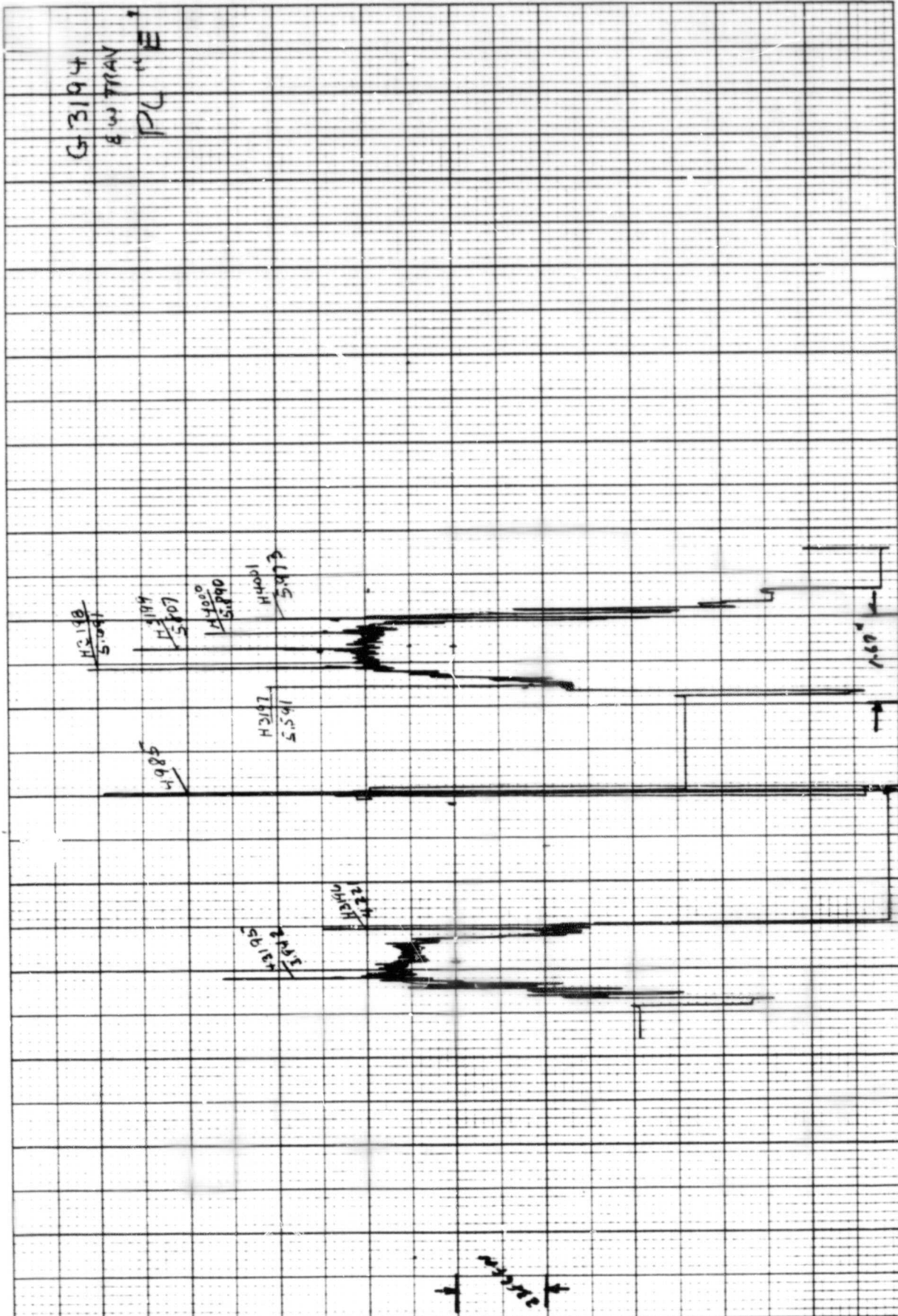
[illegible][illegible]

ORIGINAL PAGE IS
OF POOR QUALITY



G3192
PL "D"





GT 4002
B-W TRAY
PL "F"

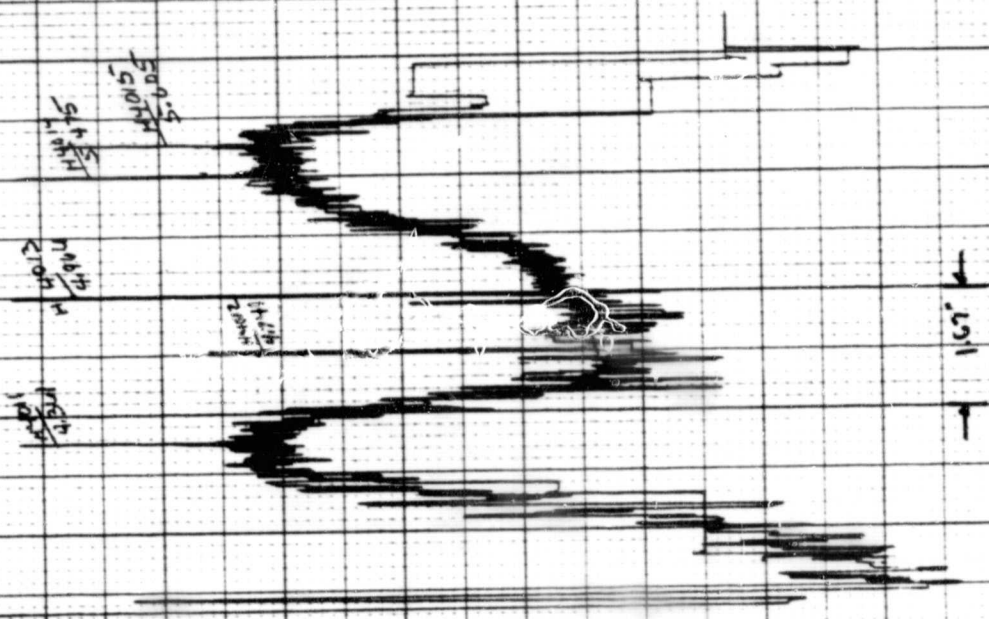
1.84

1.67

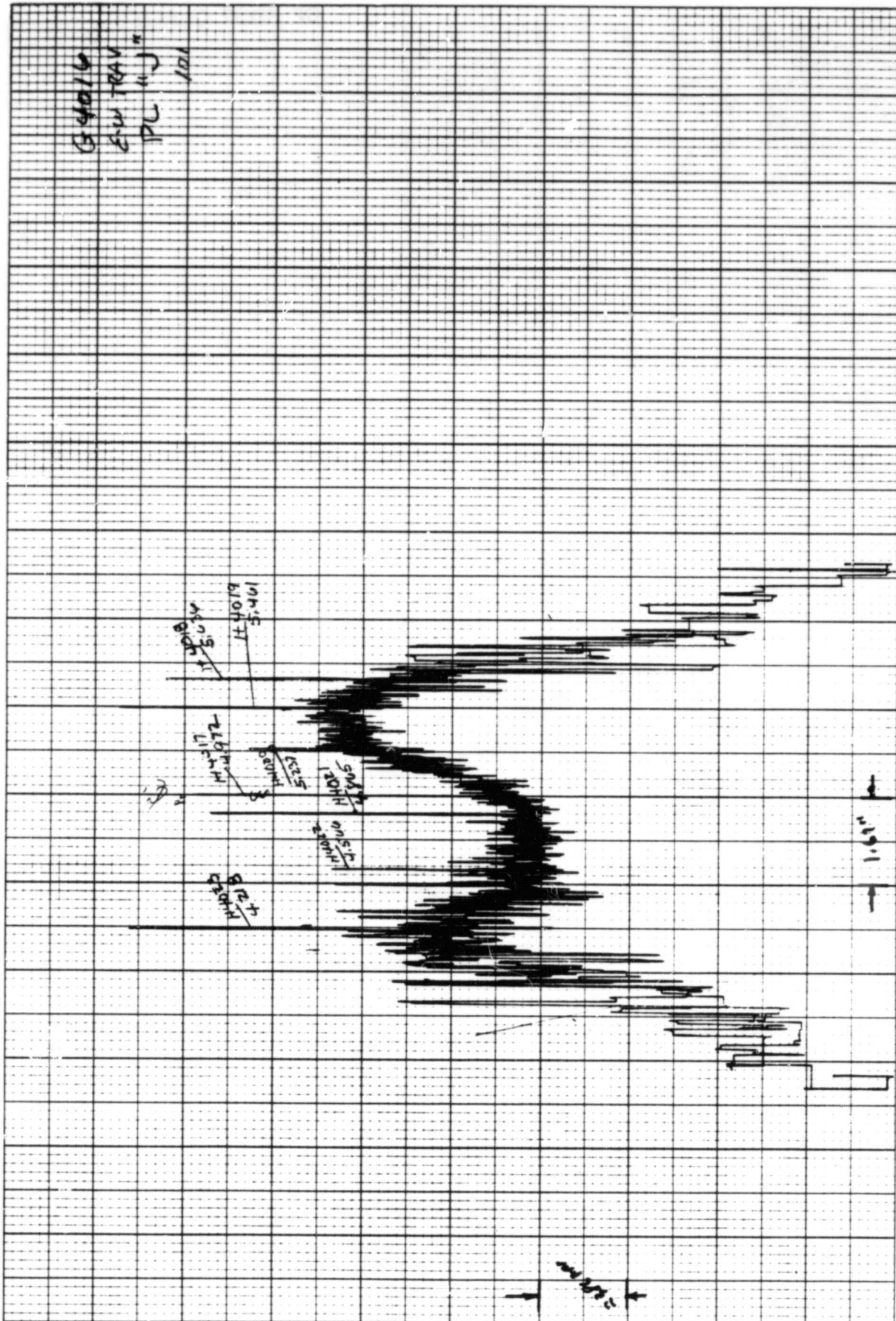
1.15

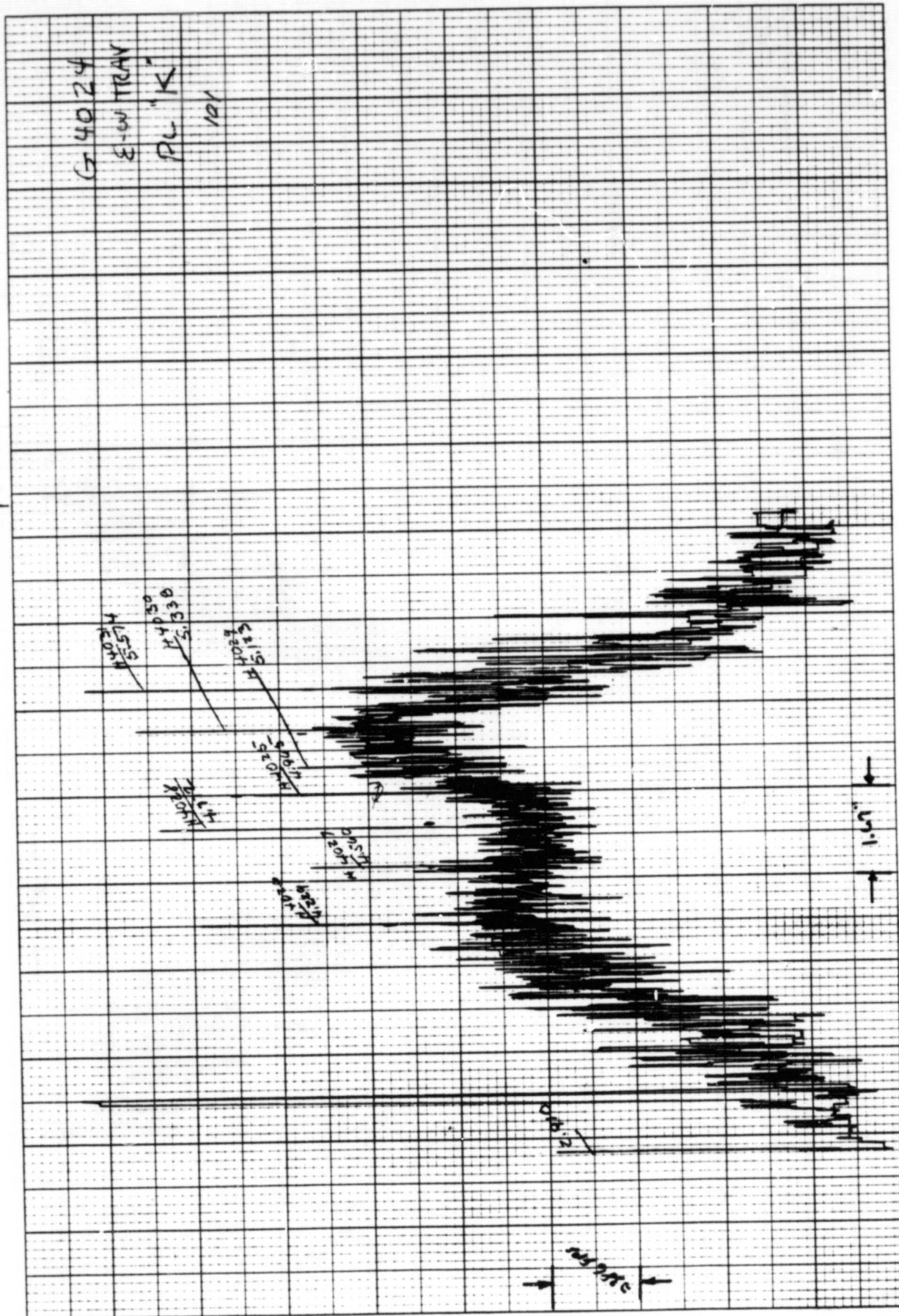
[illegible]

64010
E-W TRAY
H. 76
PL "H"

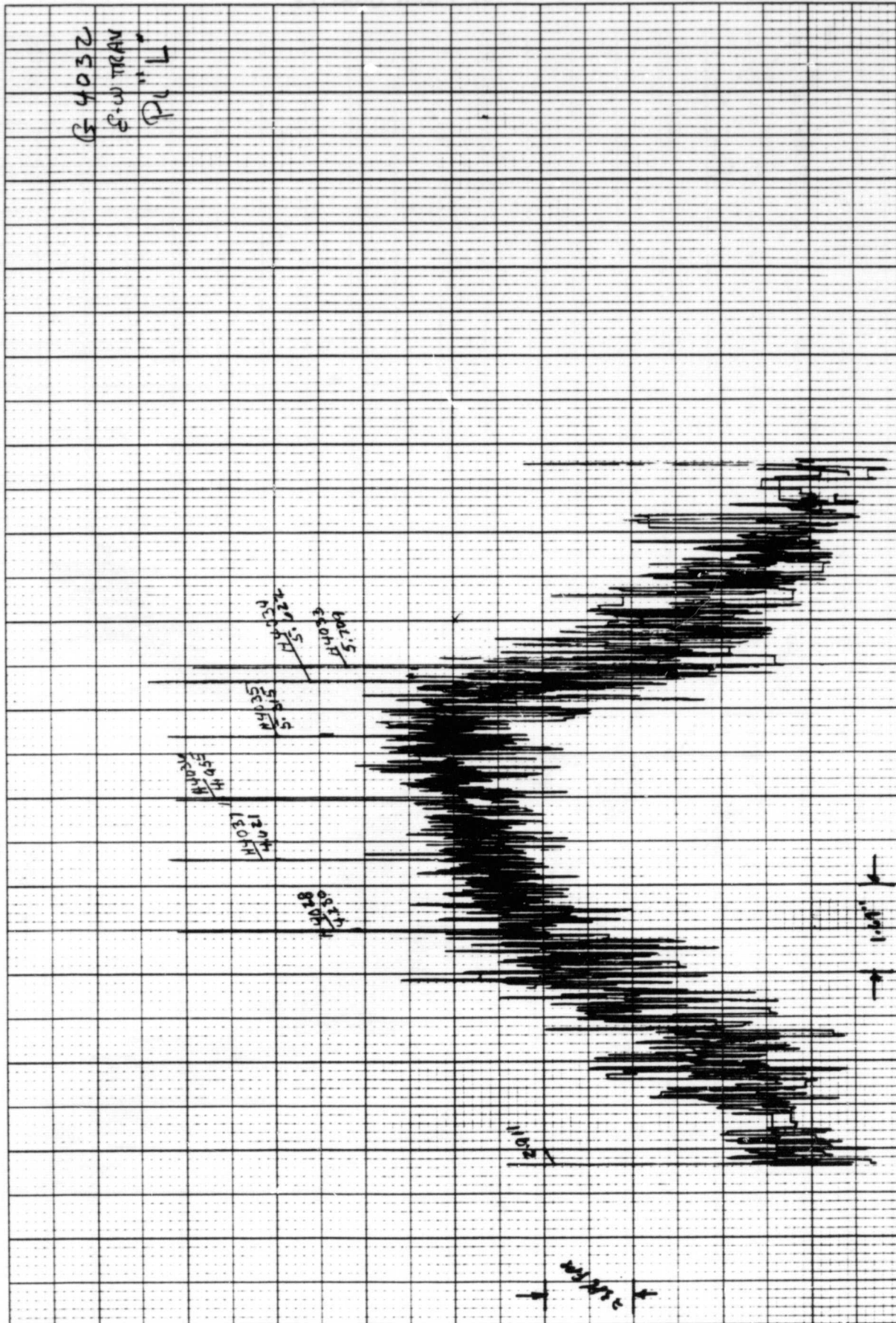


2012





ORIGINAL PAGE IS
OF POOR QUALITY



G-4089
G.W. TRAV
PL "M"

1.65
5.9
—
.279
MIN

1.86
4.5
—
.413
MIN

1.41
4.7
—
.298
MIN

1.915
4.6
—
.416
MIN

1.5

2.29 MIN

[illegible]

MODEL 1
TEST POINT 101A

ORIGINAL PAGE IS
OF POOR QUALITY

G-5040
EW T99V
PLANE G

2h05
C2.5

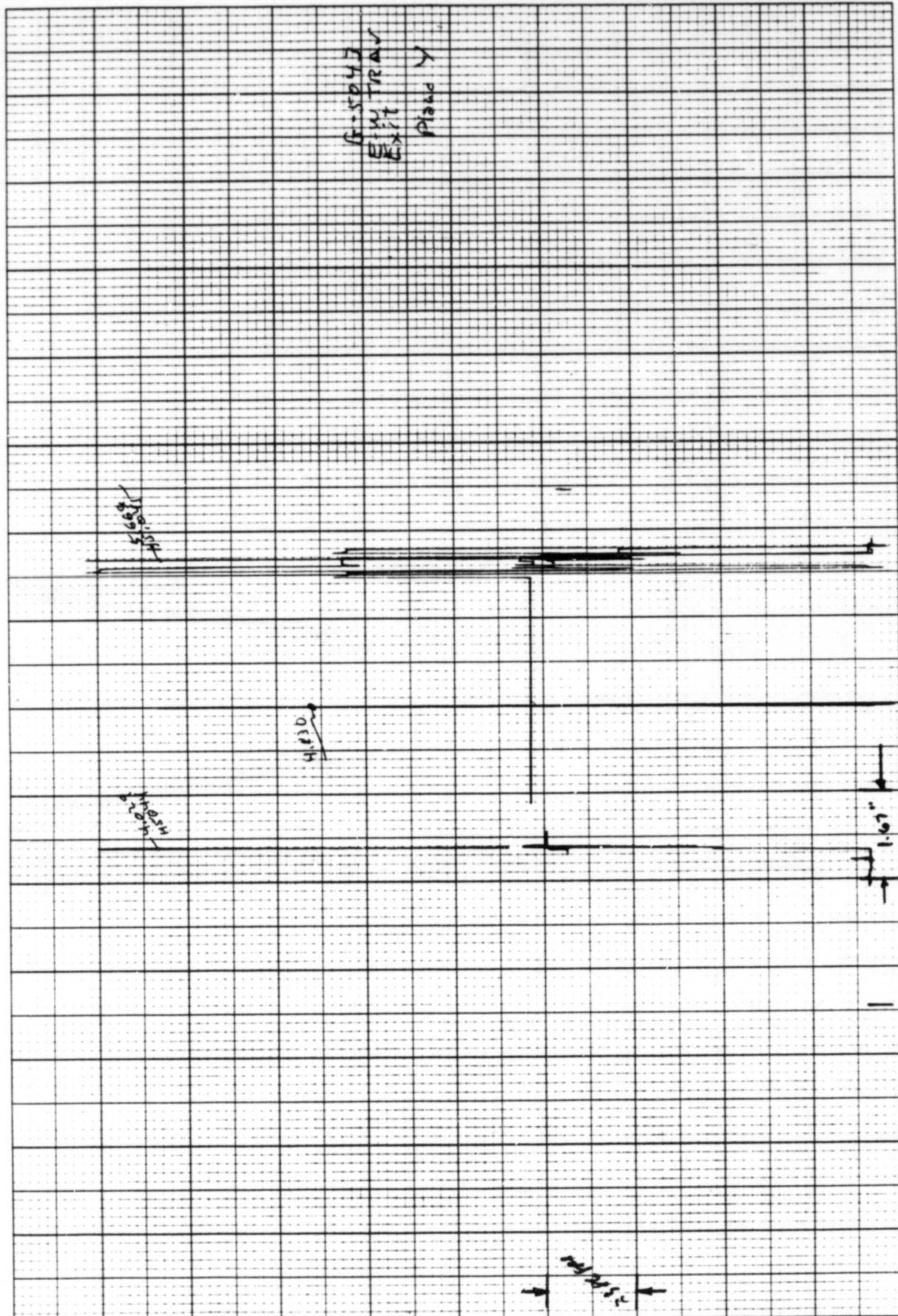
4.85

25-04-98

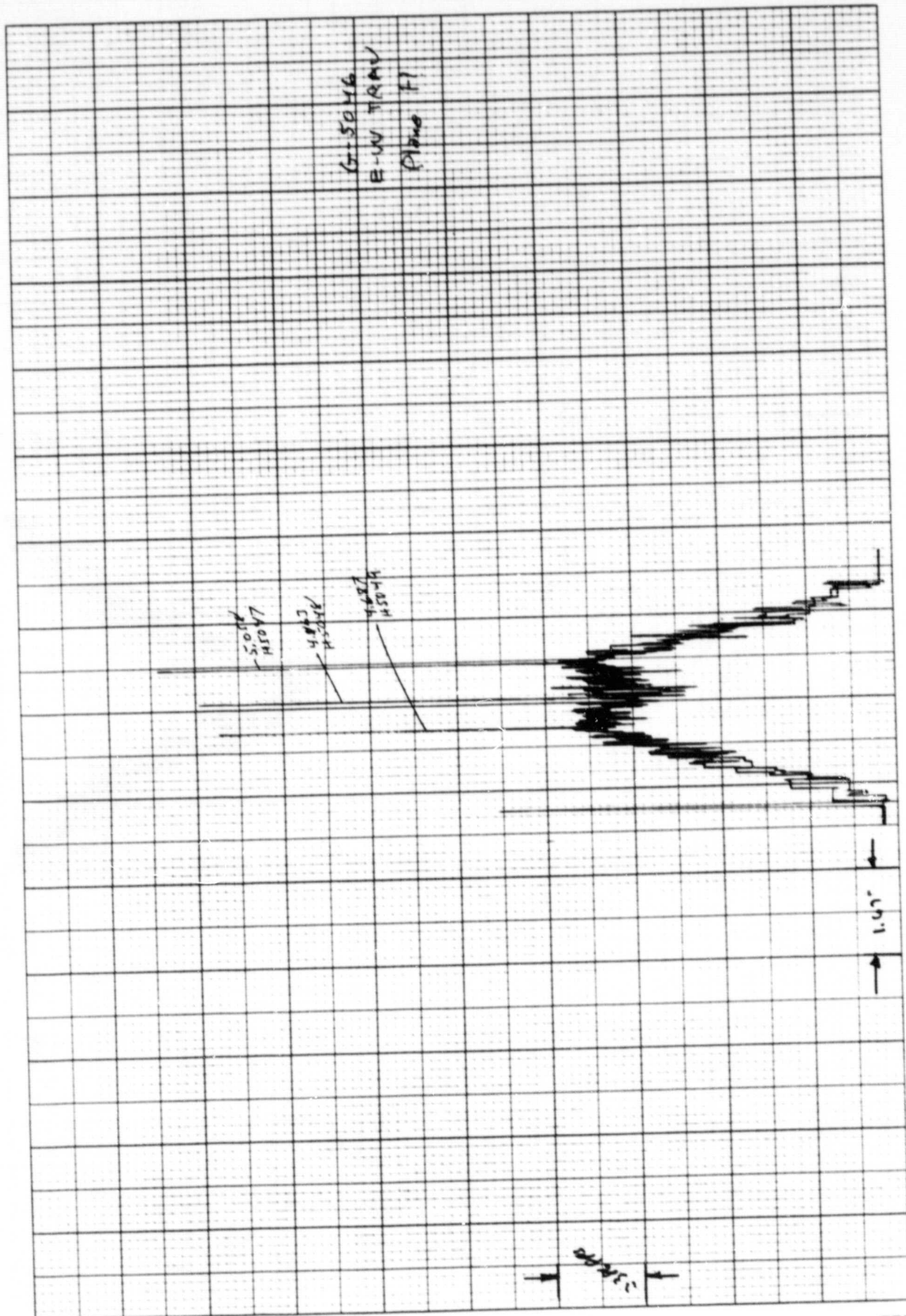
828

1.5

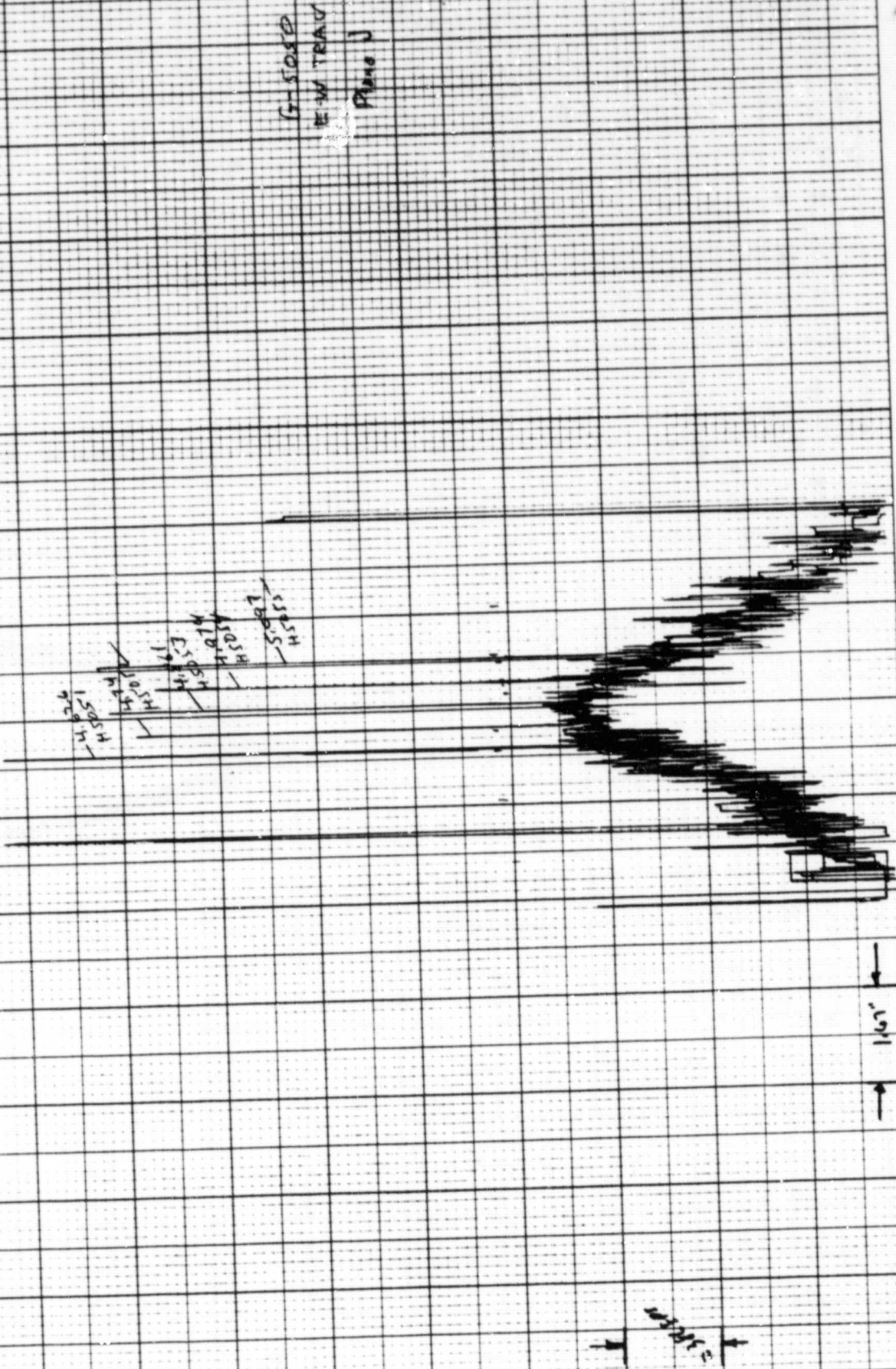
ORIGINAL PAGE IS
OF POOR QUALITY



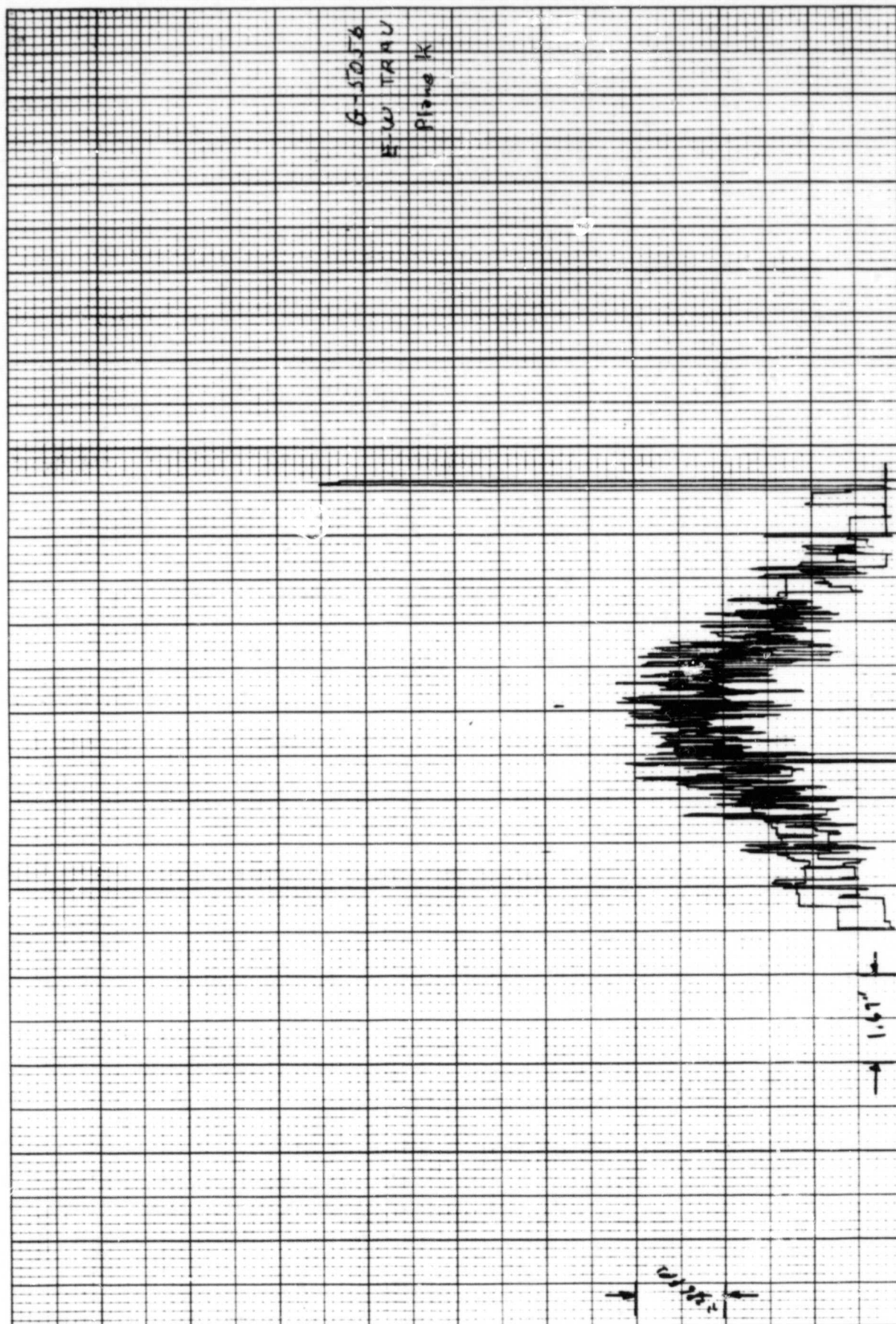
ORIGINAL PAGE IS
OF POOR QUALITY



ORIGINAL PAGE IS
OF POOR QUALITY

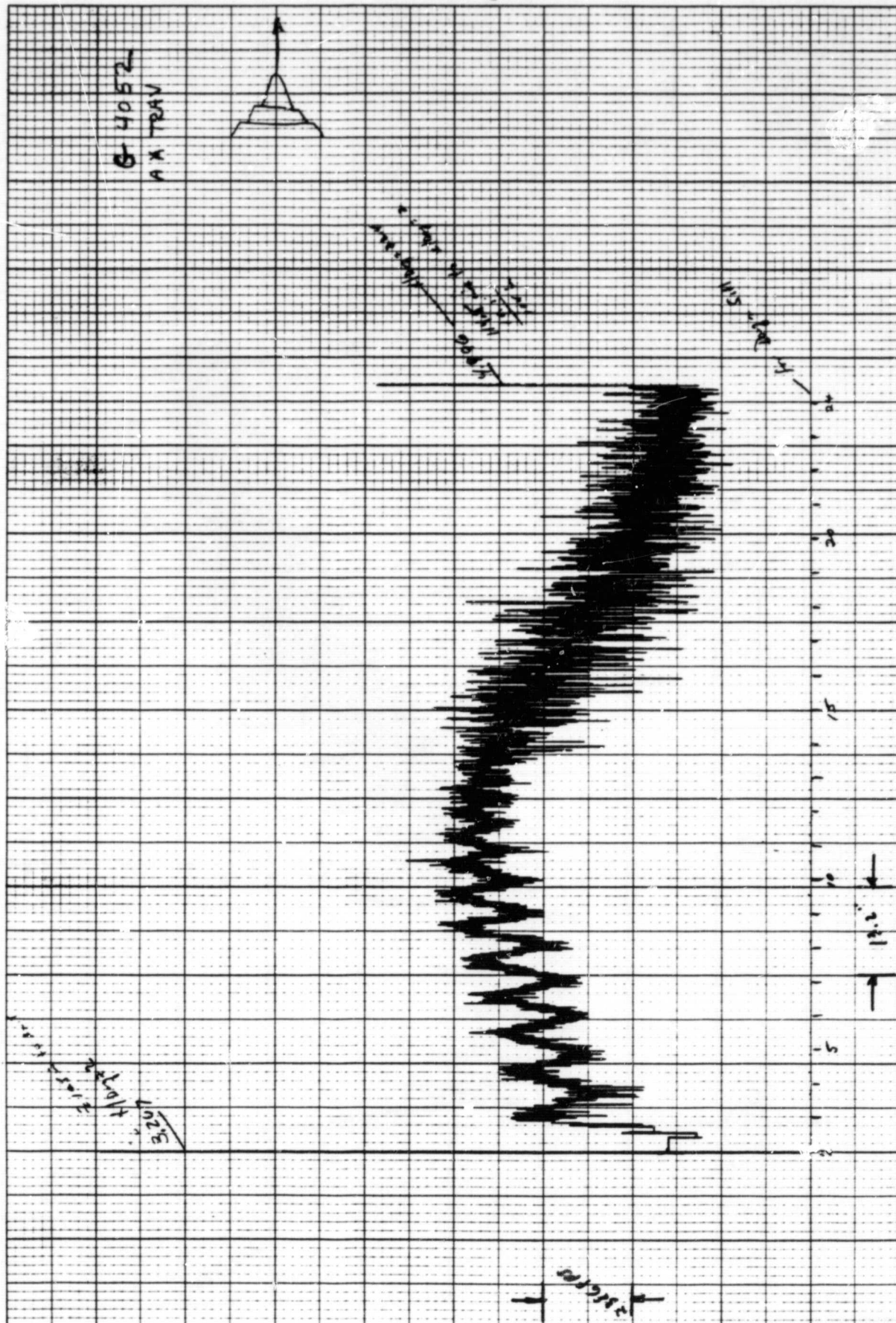


ORIGINAL PAGE IS
OF POOR QUALITY

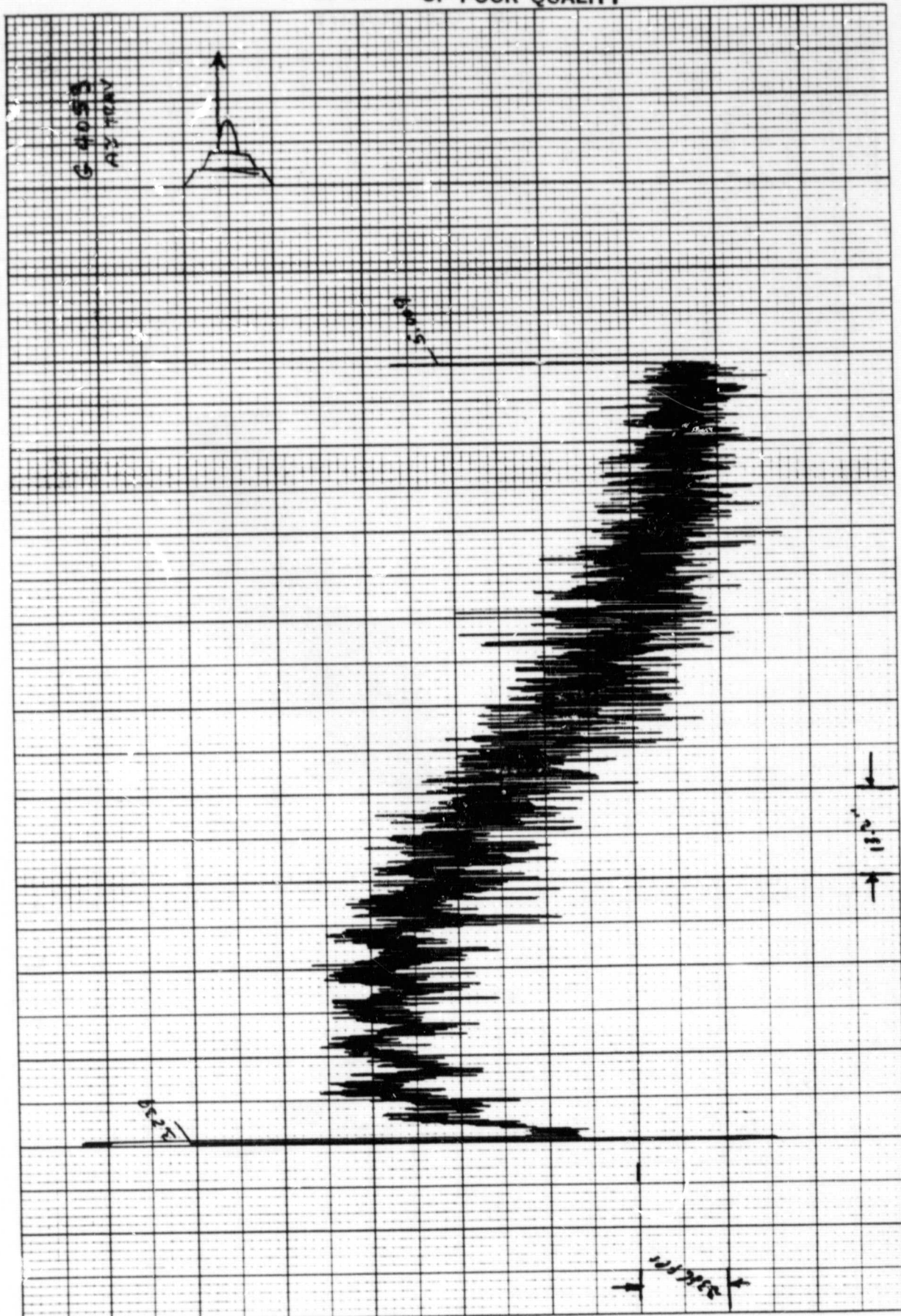


MODEL 1
TEST POINT 103

ORIGINAL PAGE IS
OF POOR QUALITY



ORIGINAL PAGE IS
OF POOR QUALITY



6-4084
ON TRAY

4.5

3.5

2.5

1.5

0.5

0

0.5

1.5

2.5

3.5

4.5

5.5

6.5

7.5

8.5

9.5

10.5

11.5

12.5

13.5

14.5

15.5

16.5

17.5

18.5

19.5

20.5

21.5

22.5

23.5

24.5

25.5

26.5

27.5

28.5

29.5

30.5

31.5

32.5

33.5

34.5

35.5

36.5

37.5

38.5

39.5

40.5

41.5

42.5

43.5

44.5

45.5

46.5

47.5

48.5

49.5

50.5

51.5

52.5

53.5

54.5

55.5

56.5

57.5

58.5

59.5

60.5

61.5

62.5

63.5

64.5

65.5

66.5

67.5

68.5

69.5

70.5

71.5

72.5

73.5

74.5

75.5

76.5

77.5

78.5

79.5

80.5

81.5

82.5

83.5

84.5

85.5

86.5

87.5

88.5

89.5

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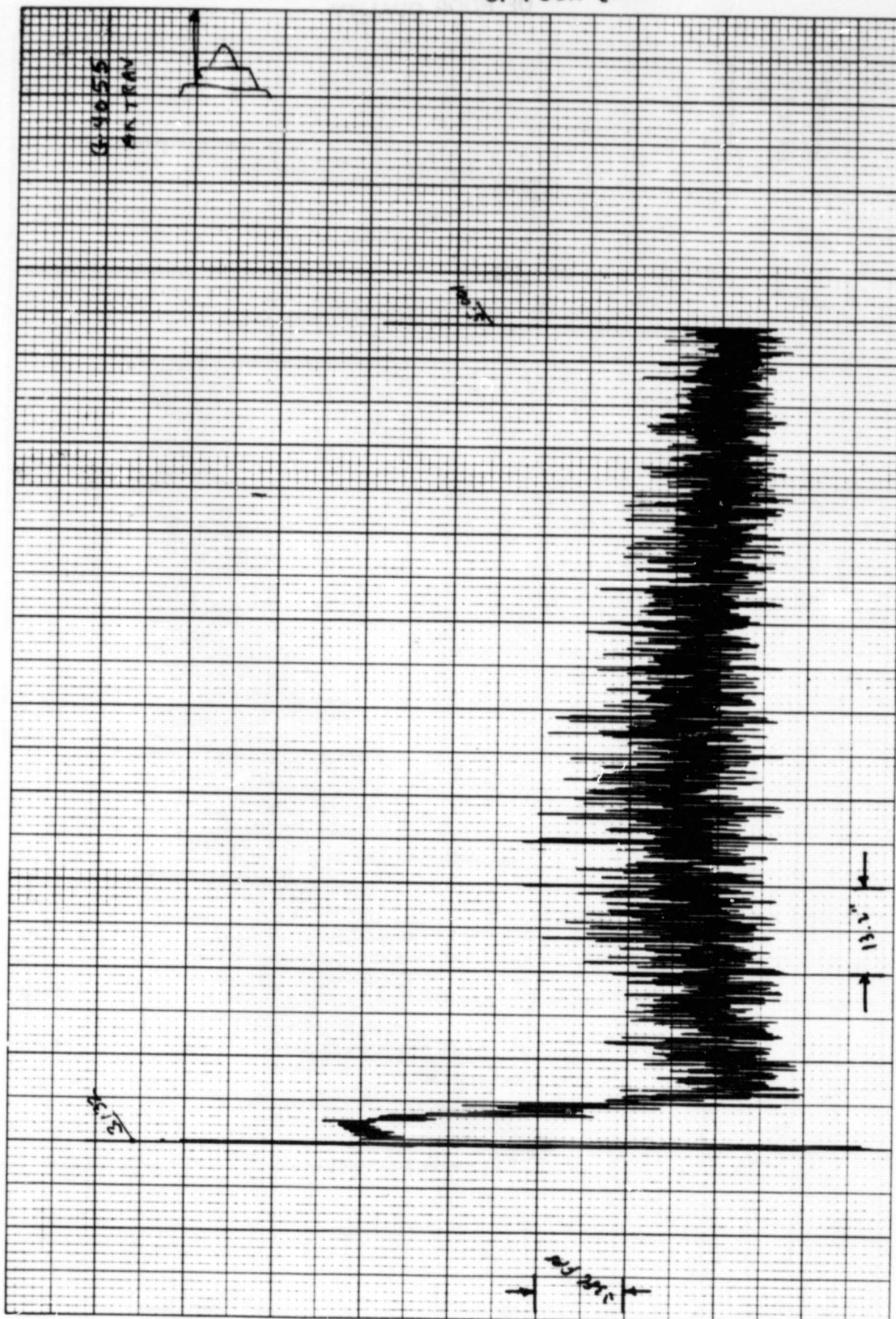
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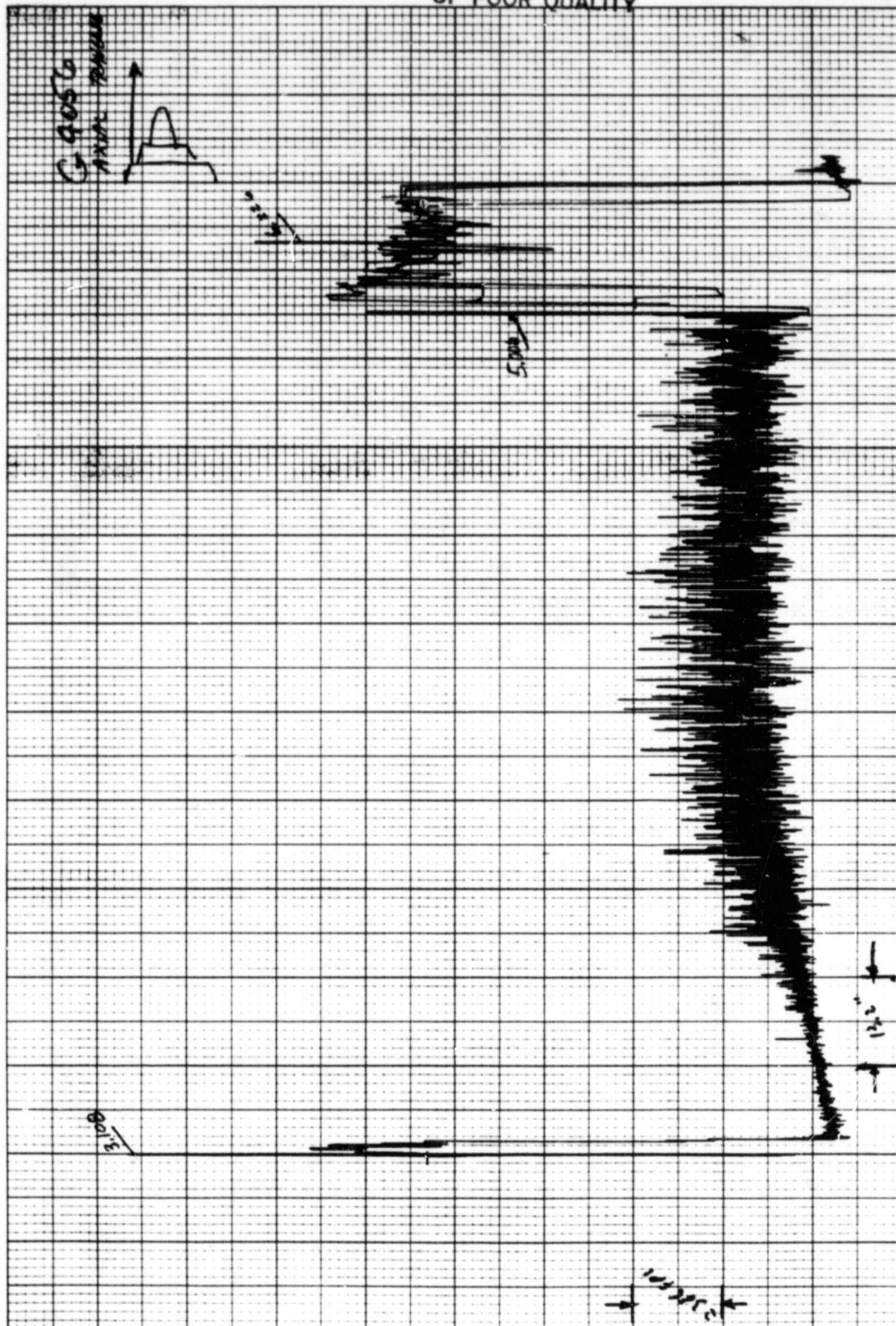
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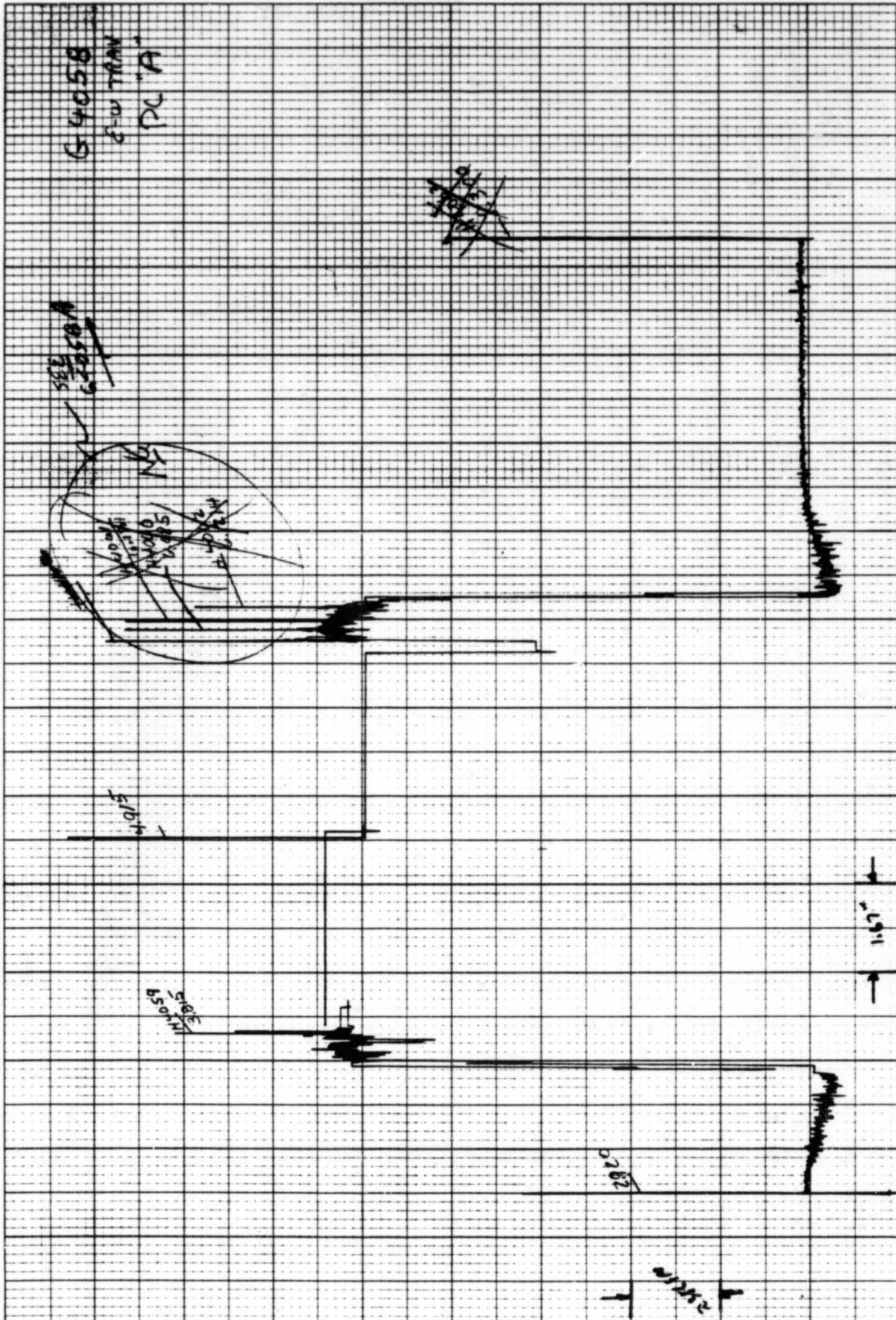
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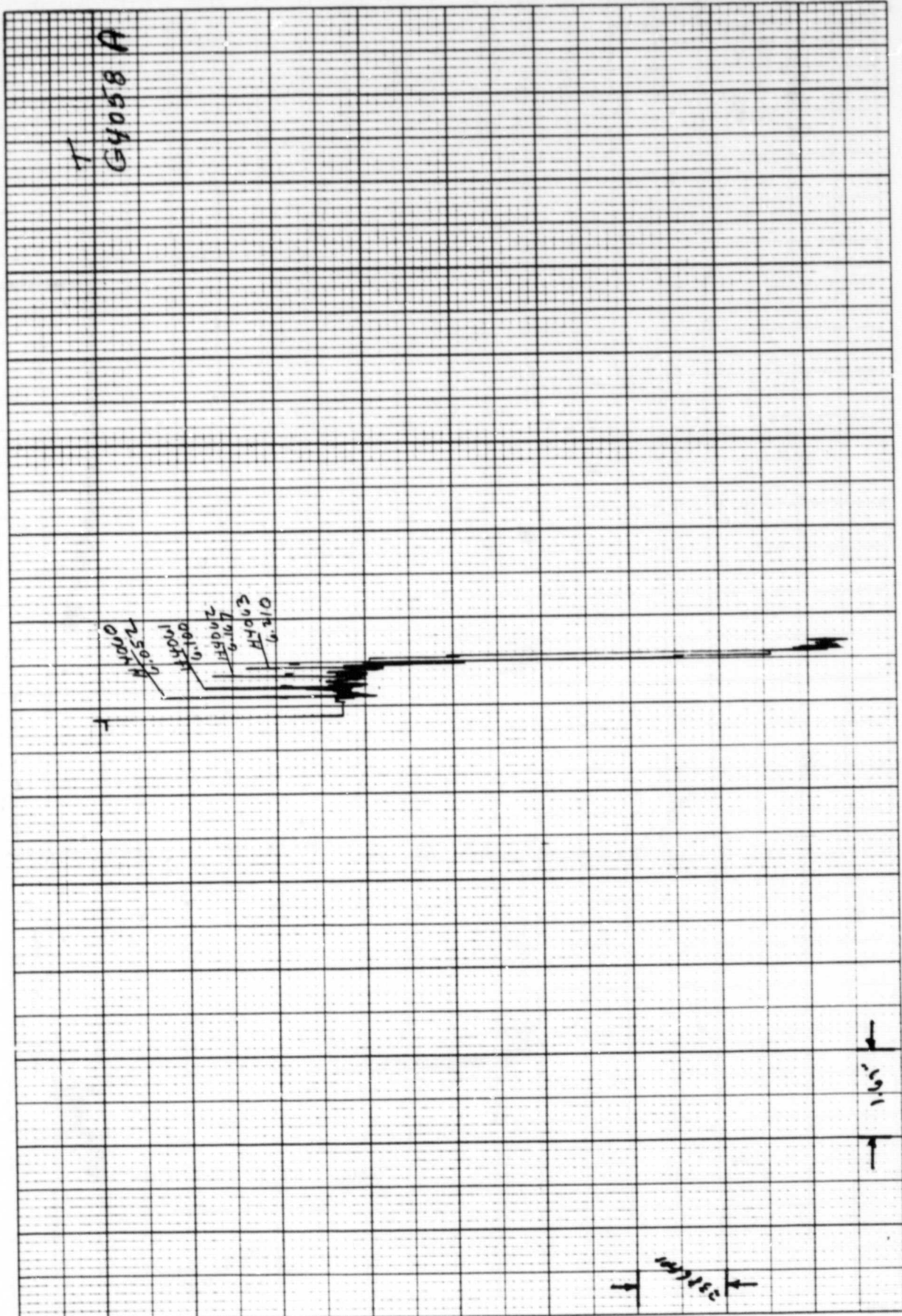
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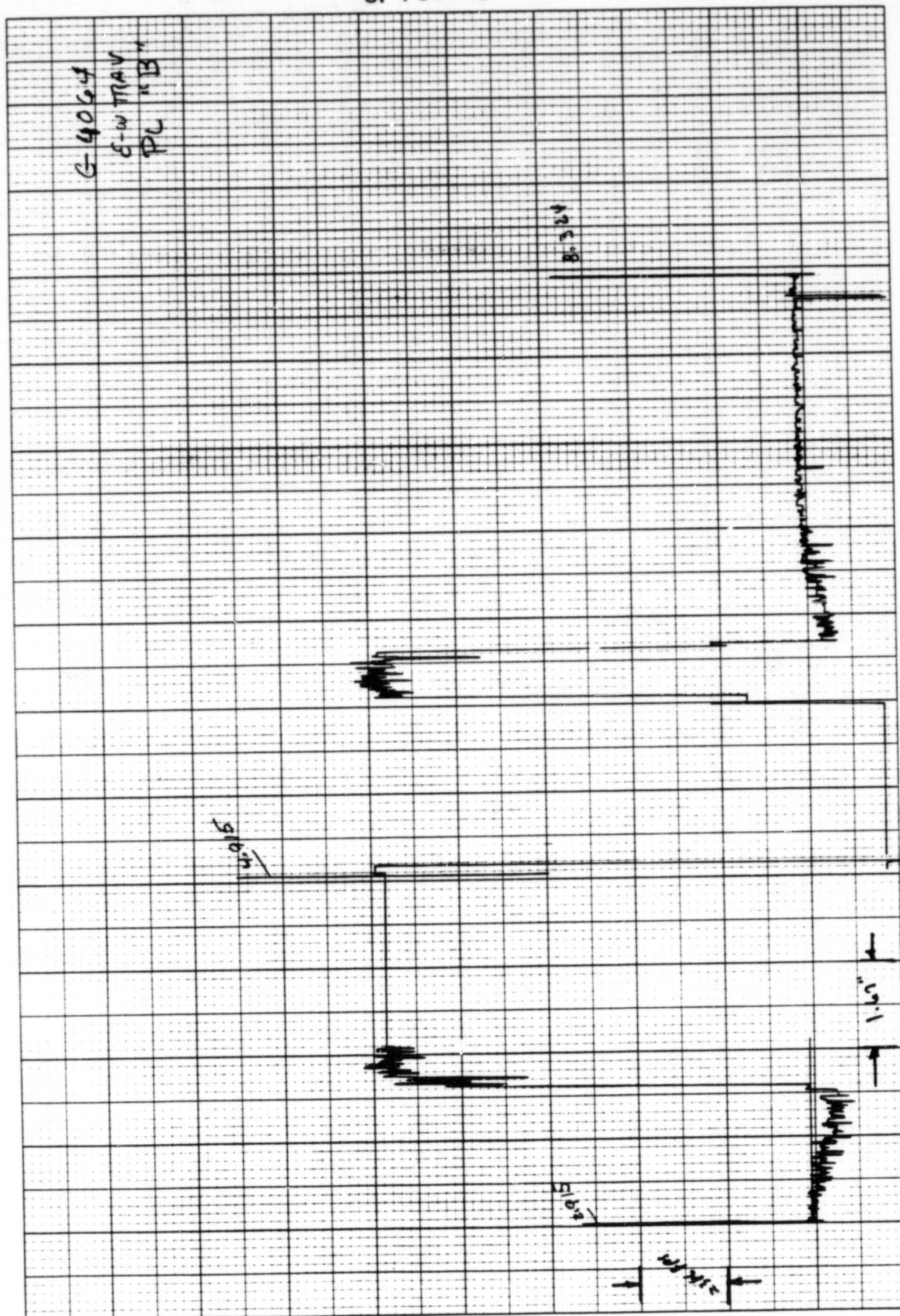
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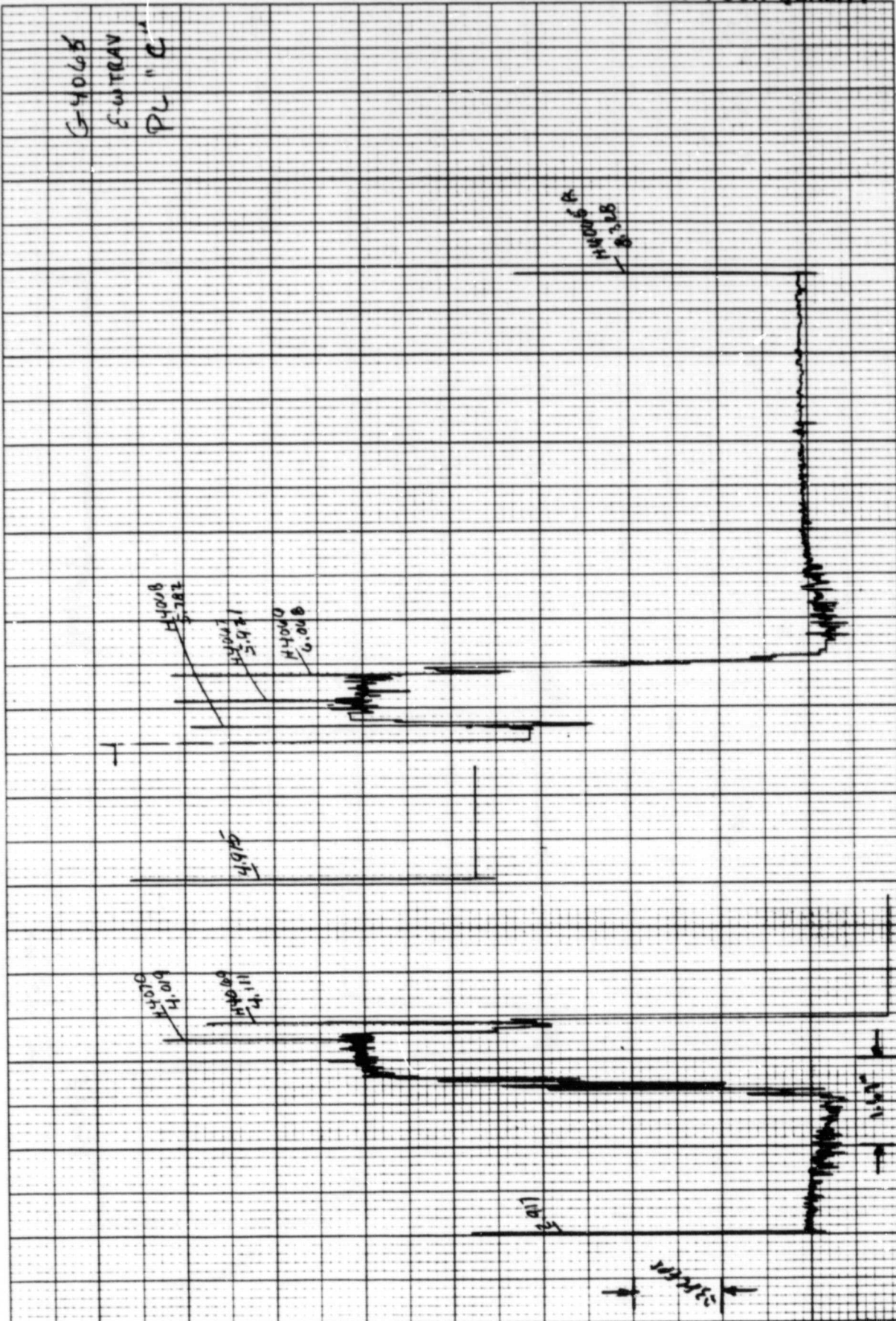


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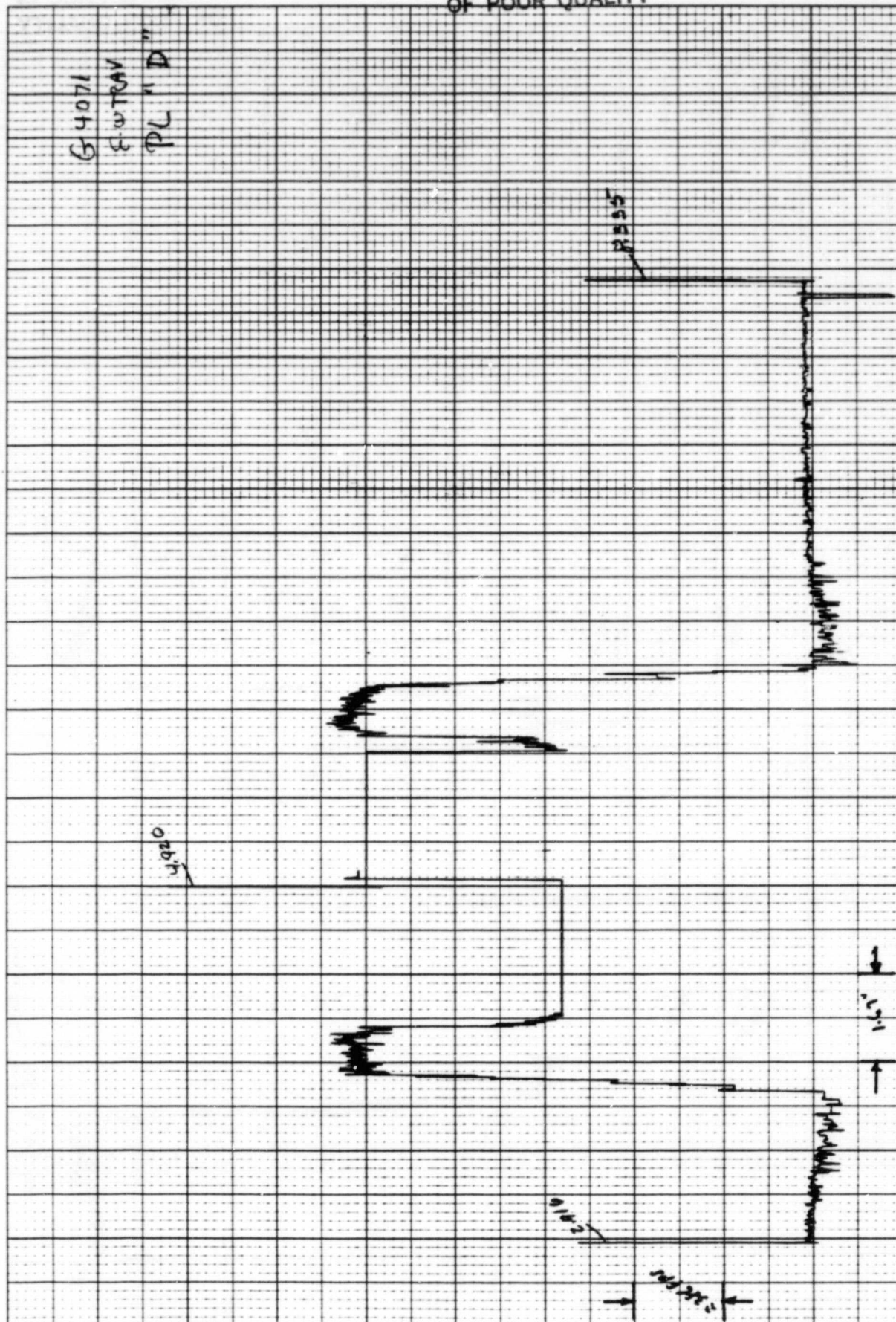
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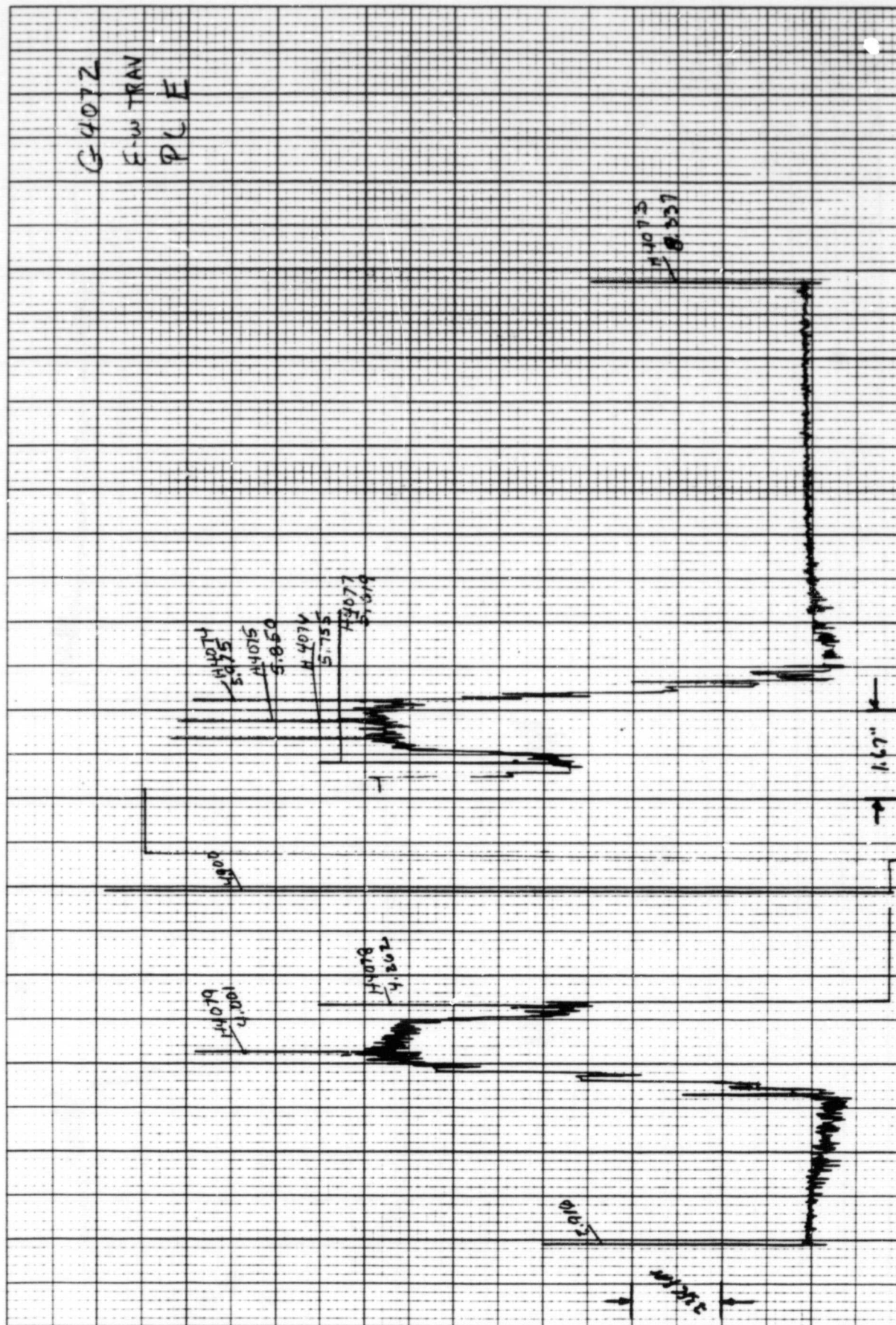


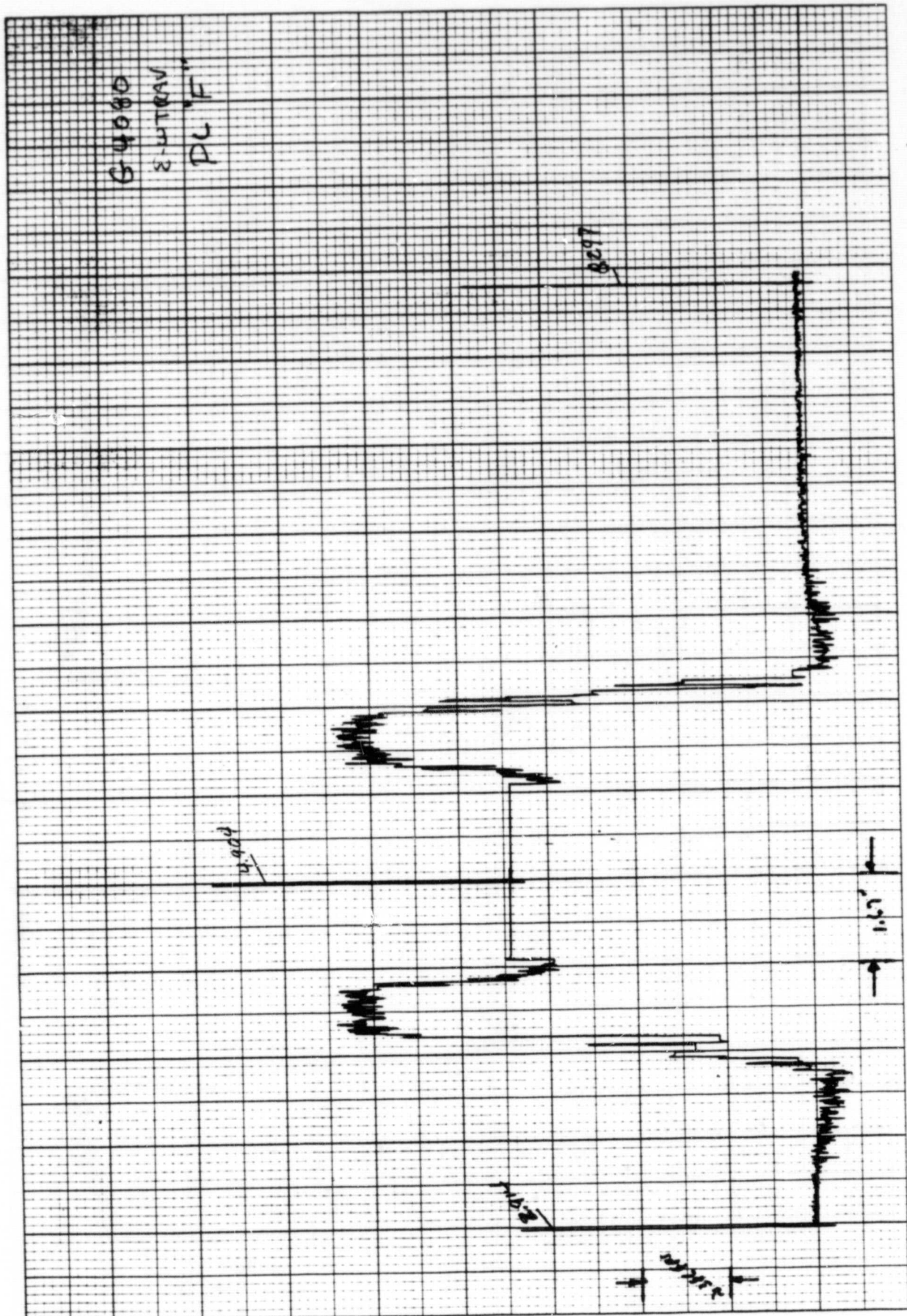


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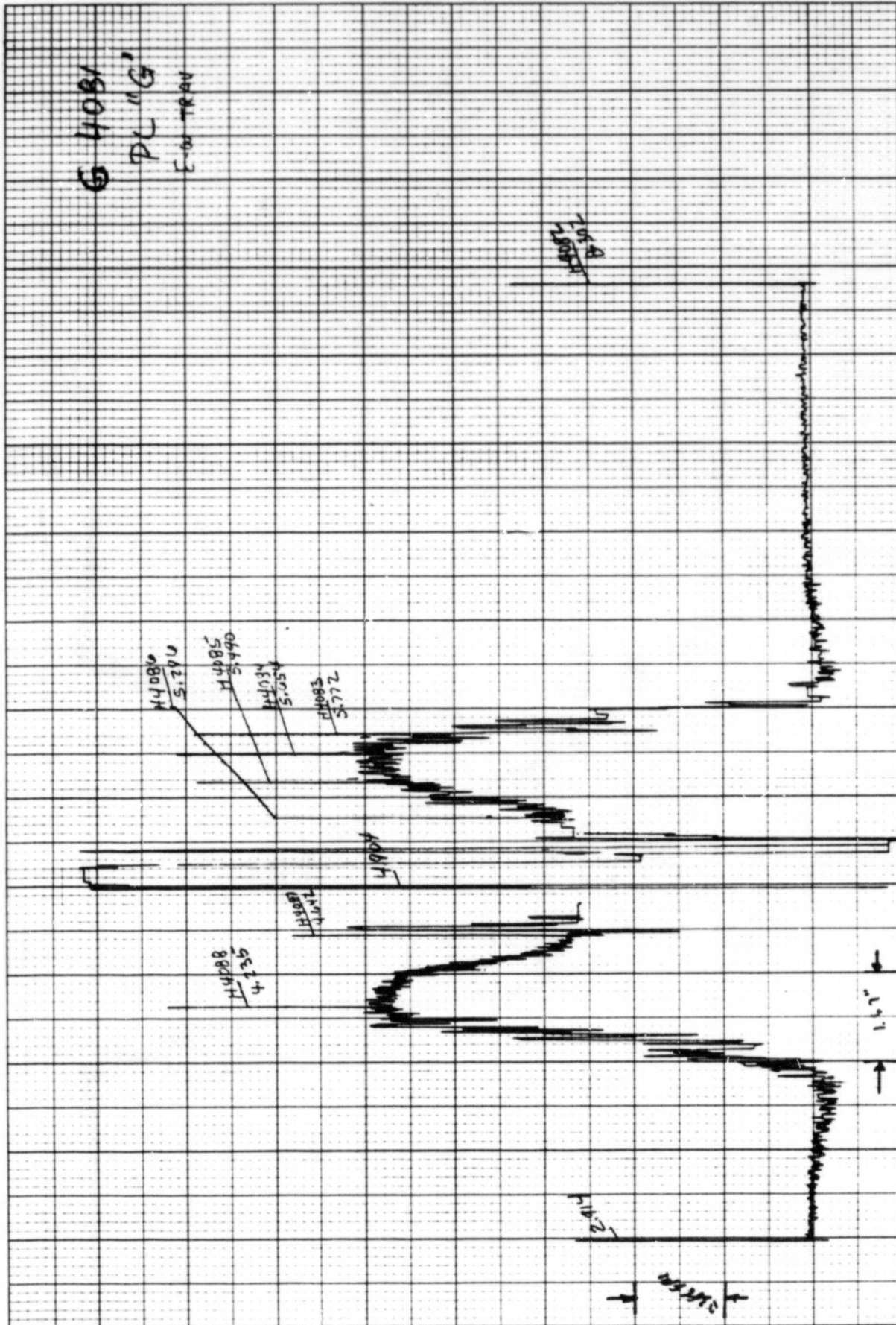
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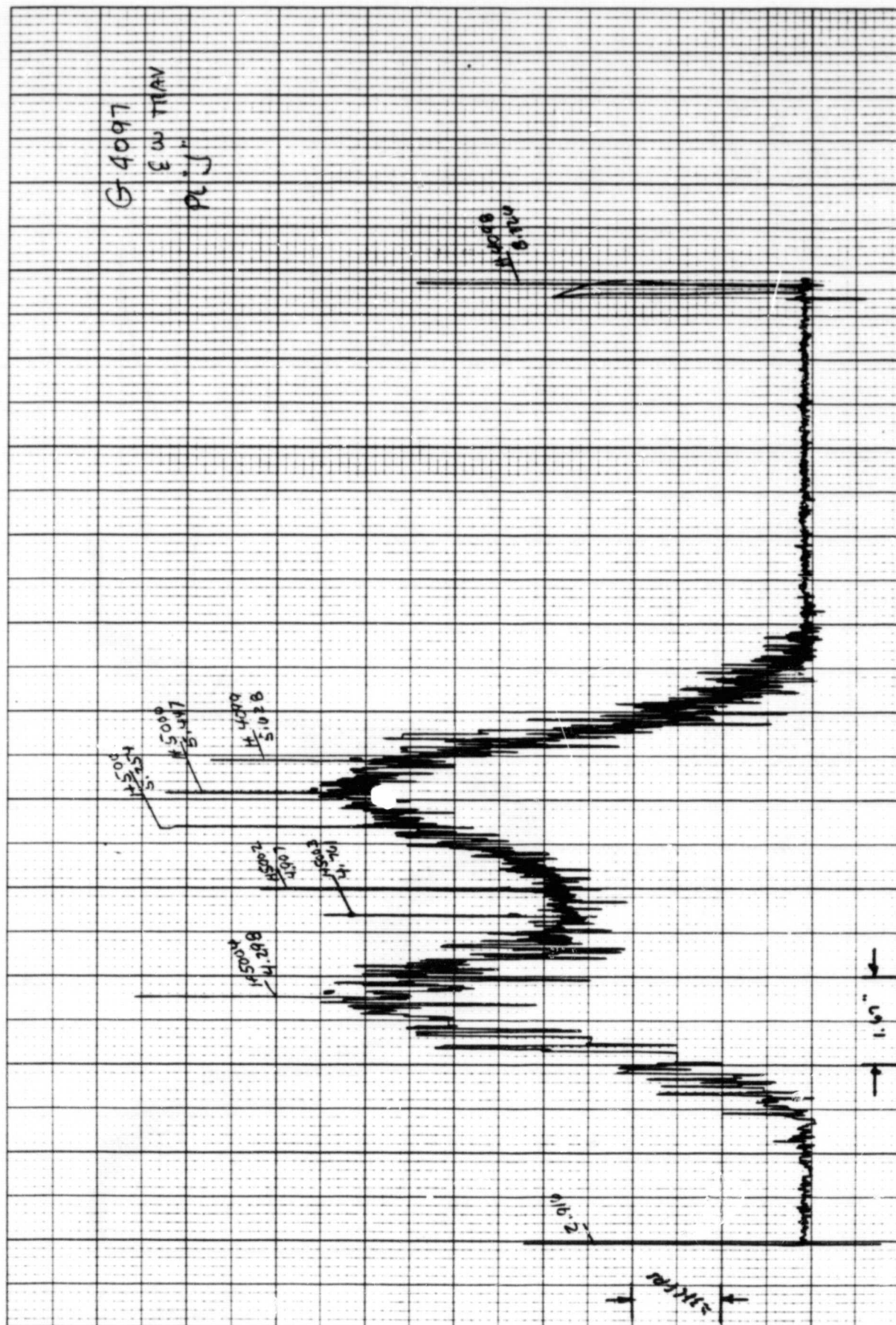
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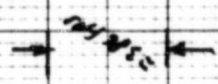
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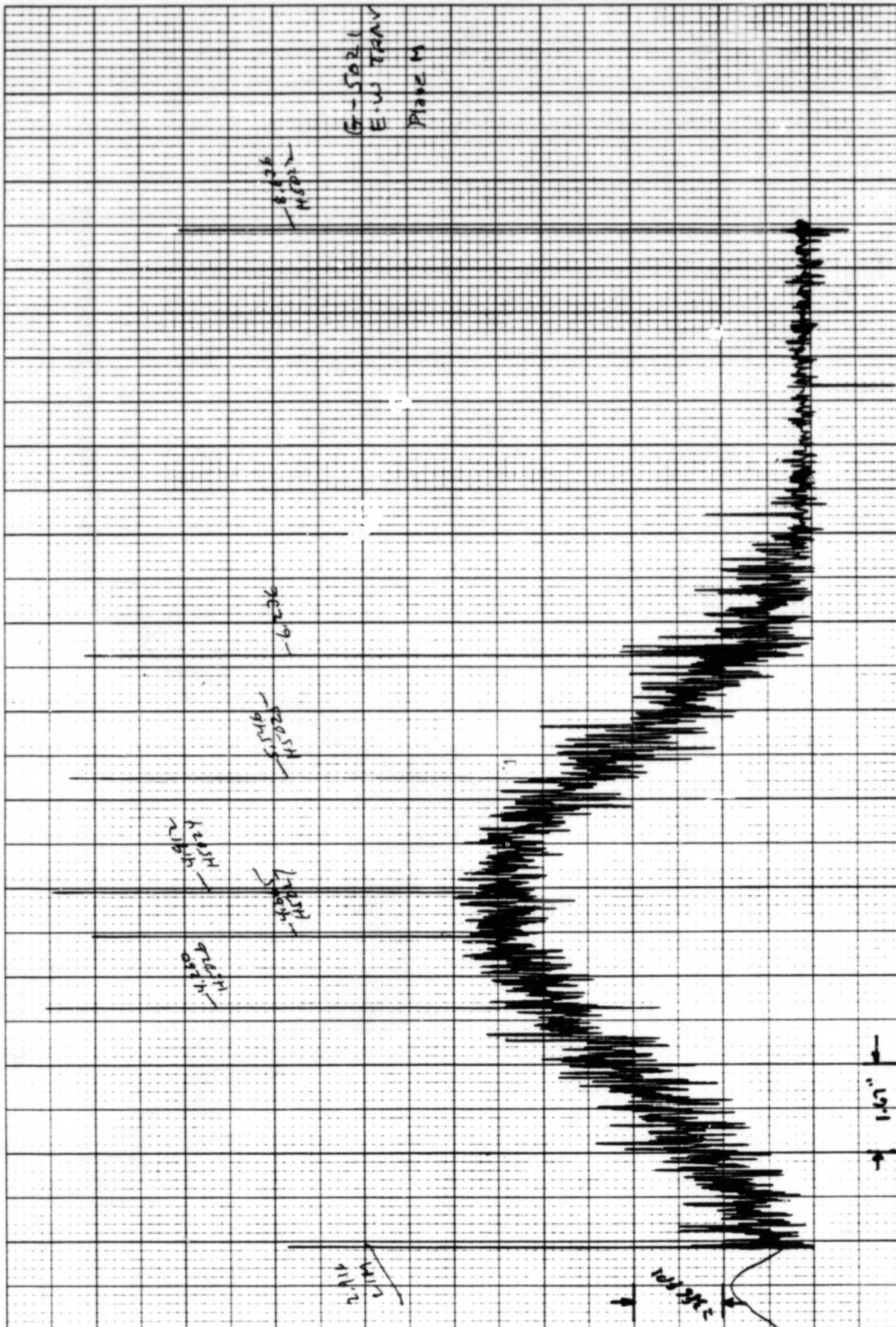
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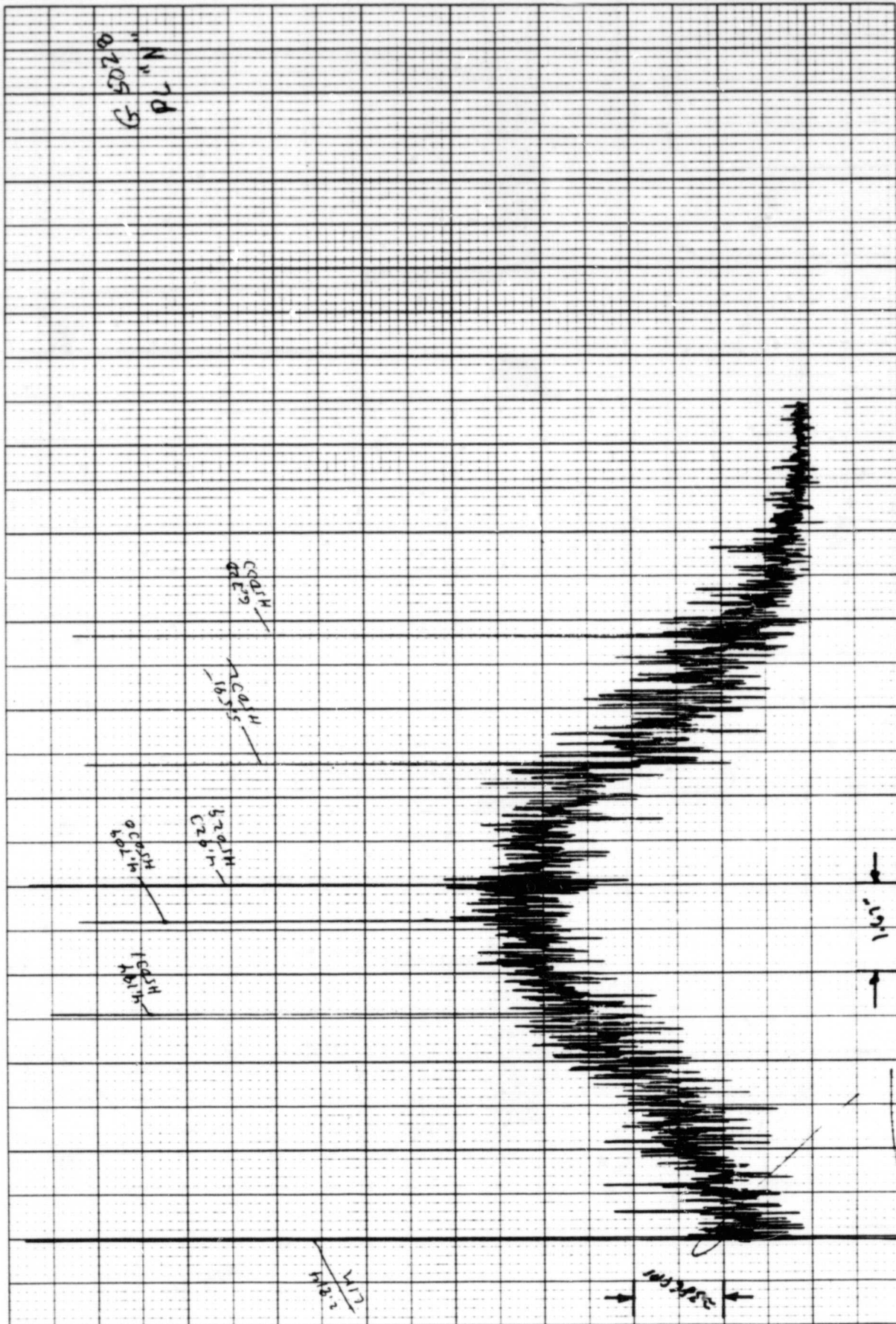
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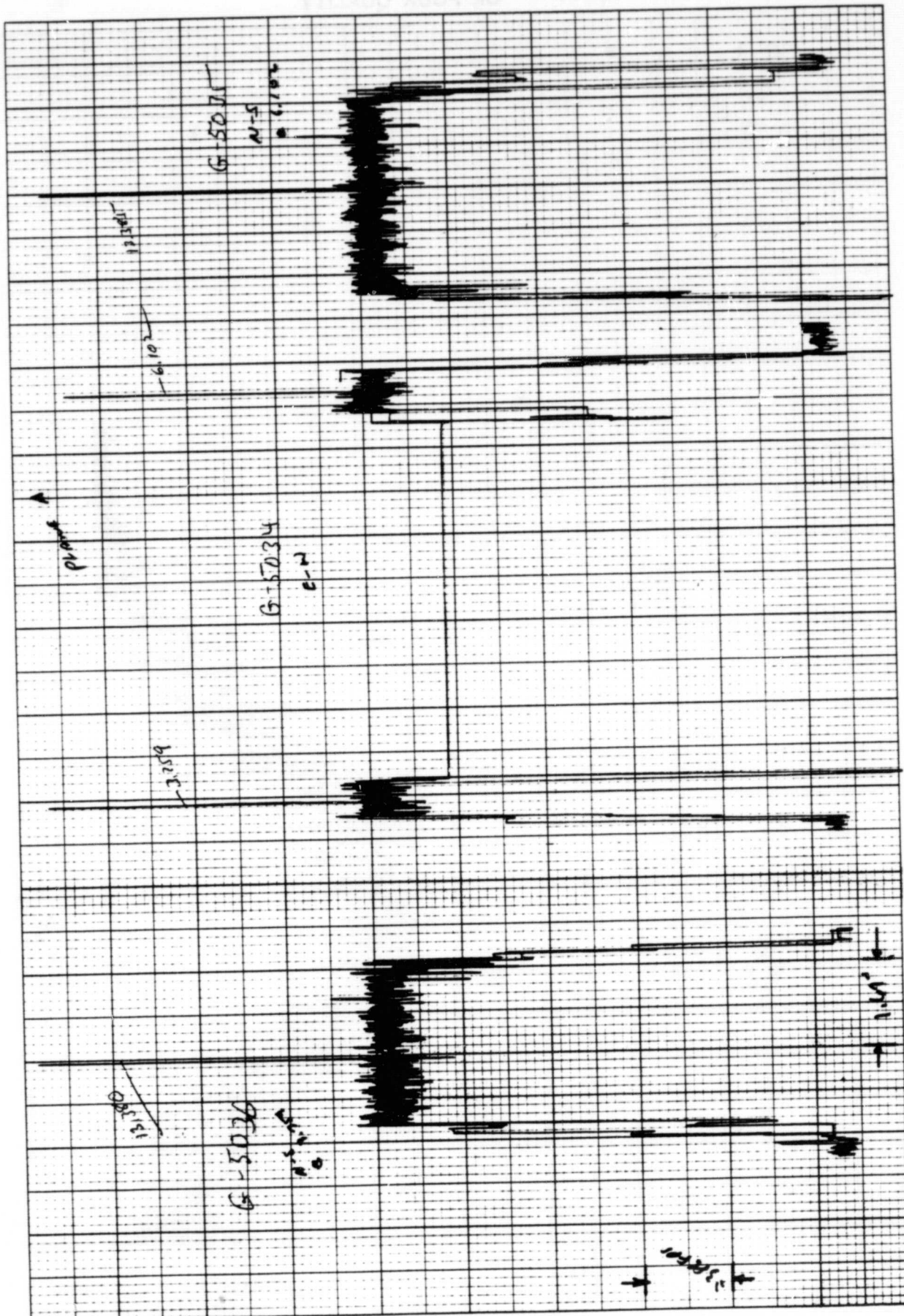
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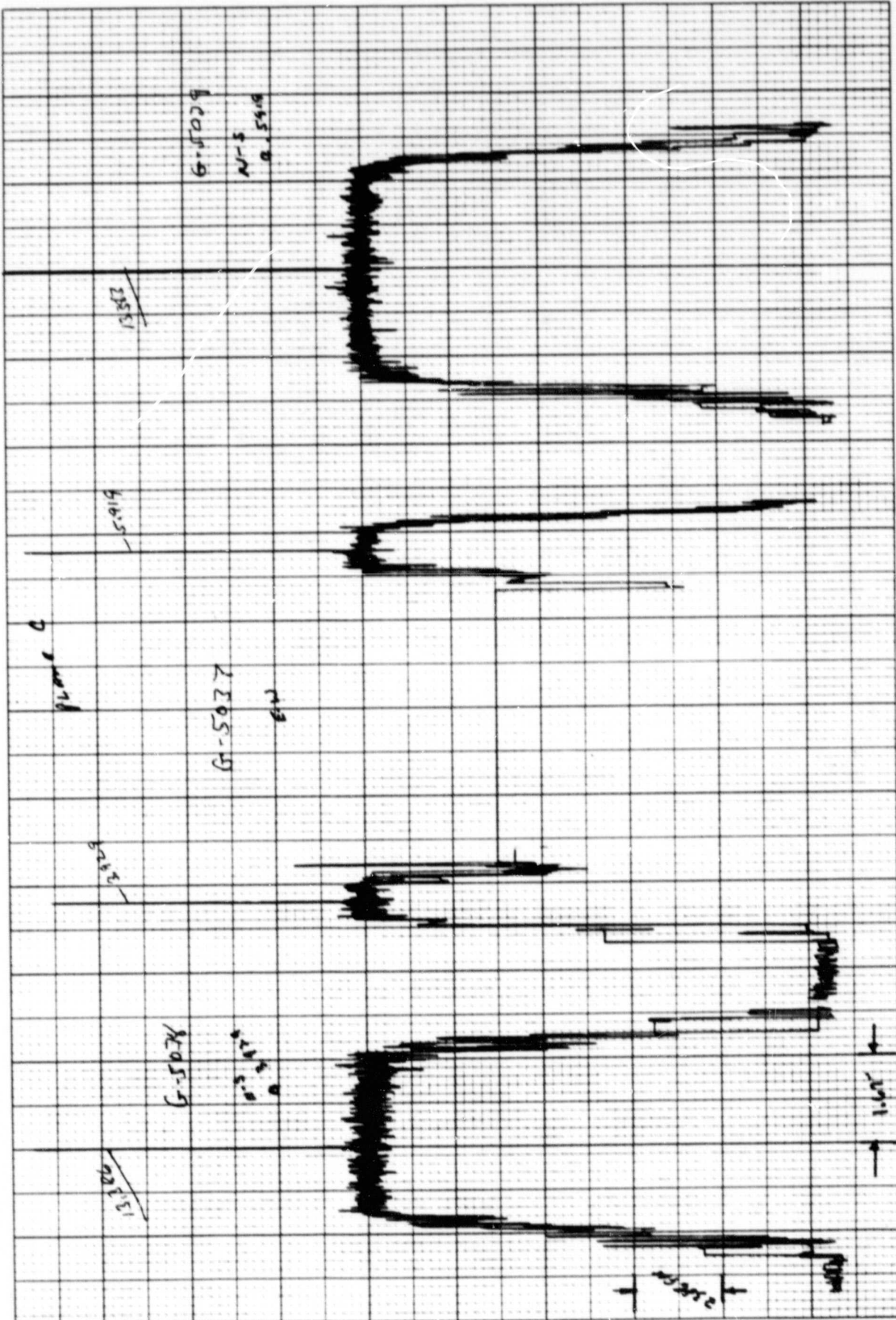
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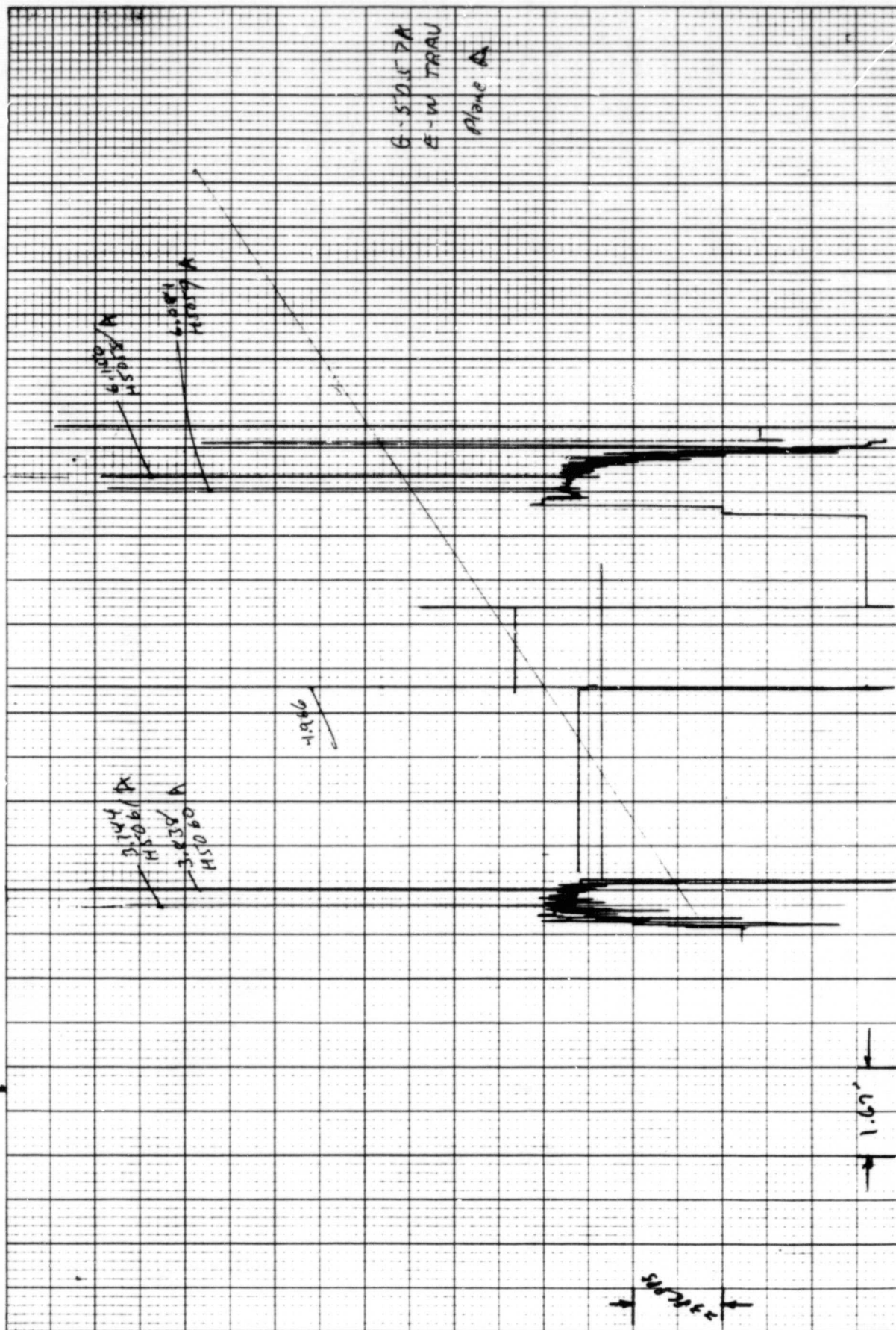


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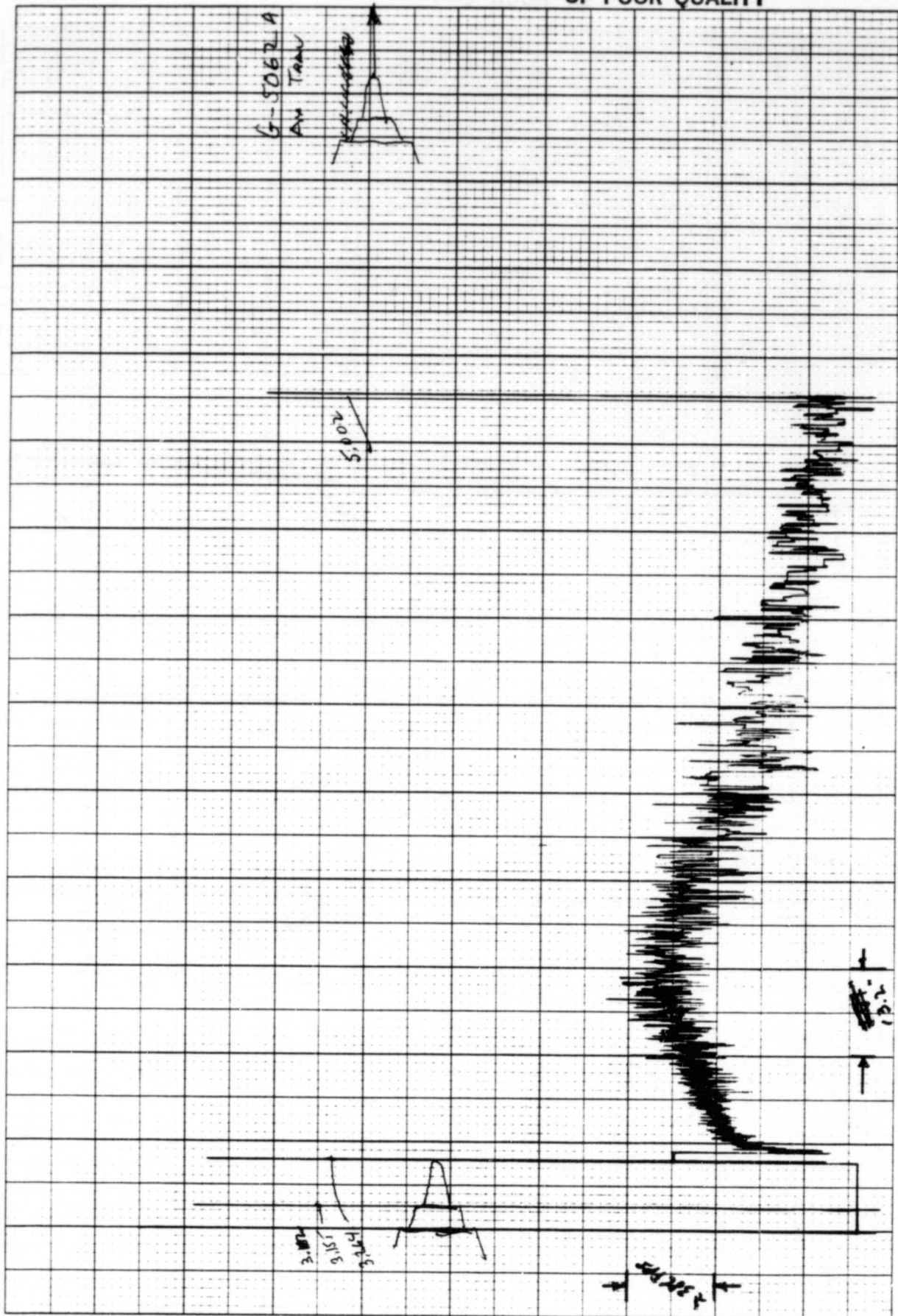


MODEL 1
TEST POINT 1505

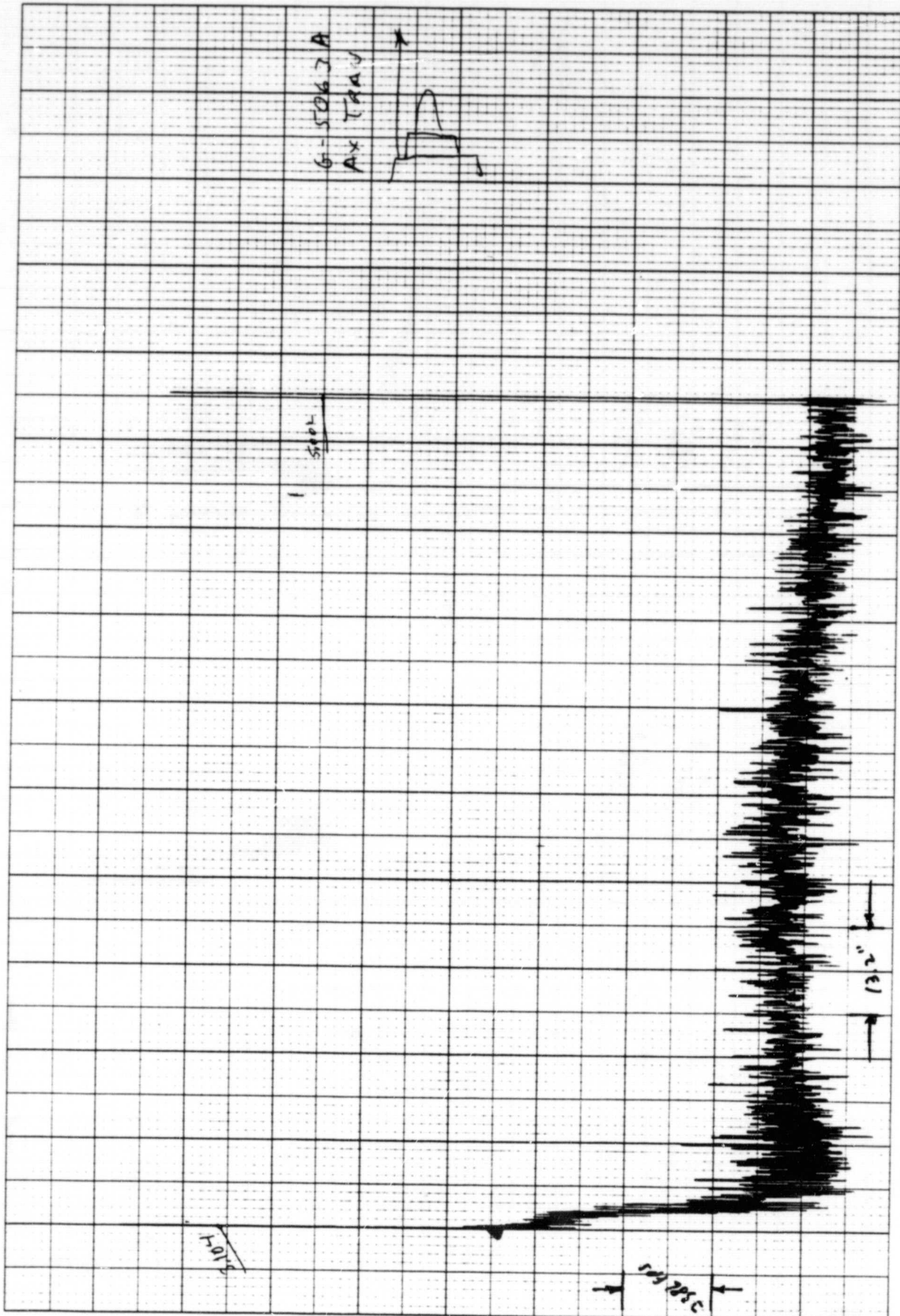
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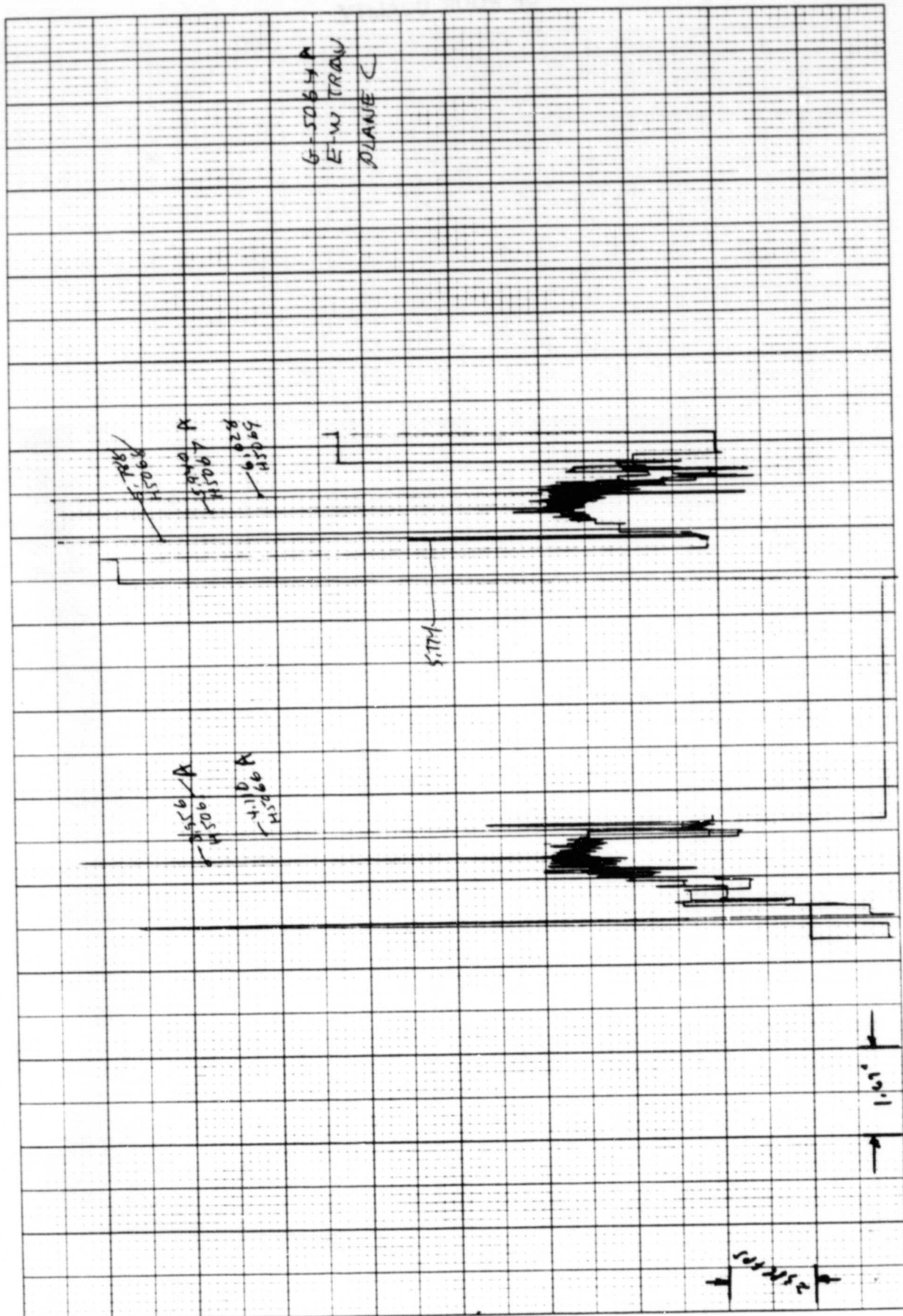


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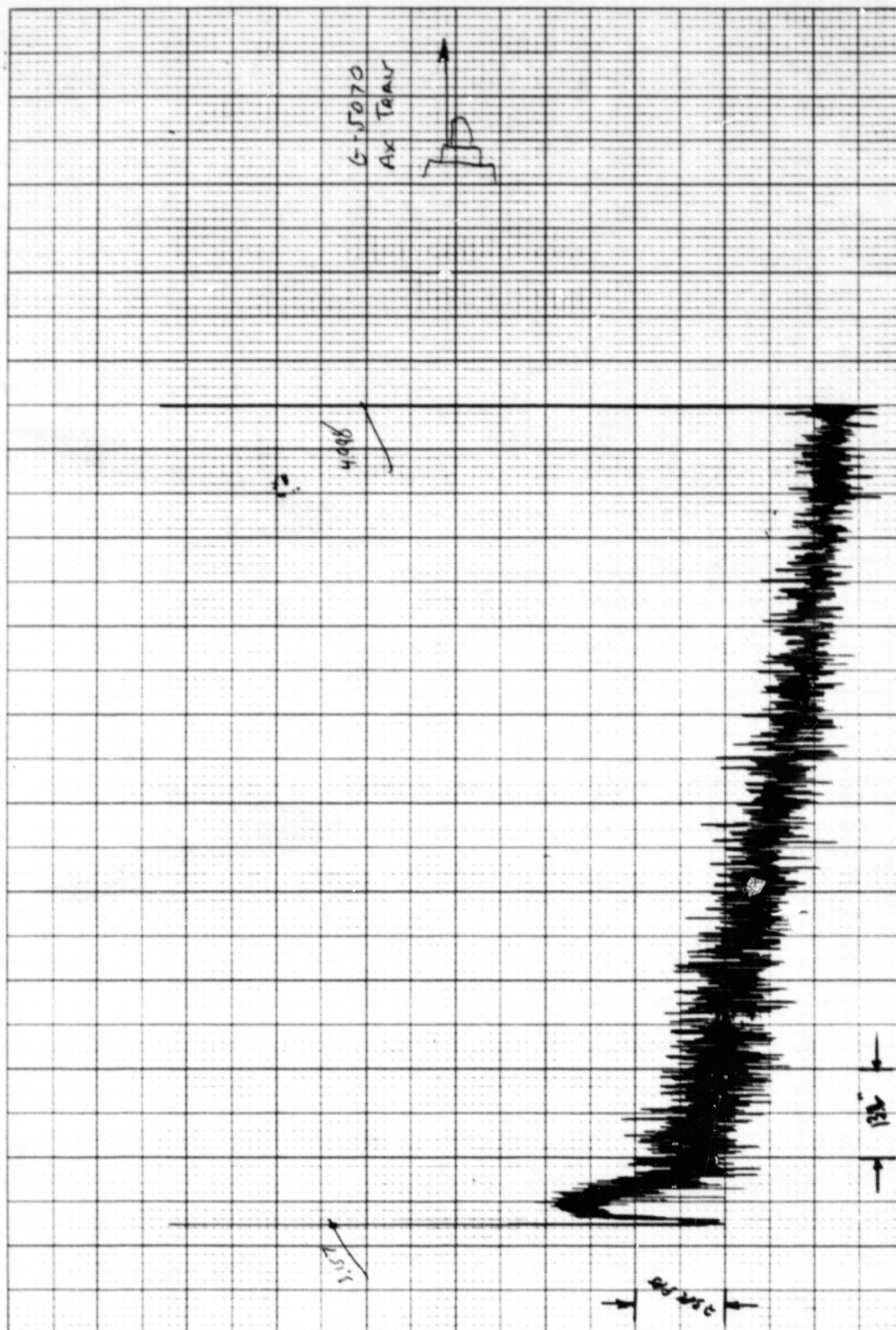


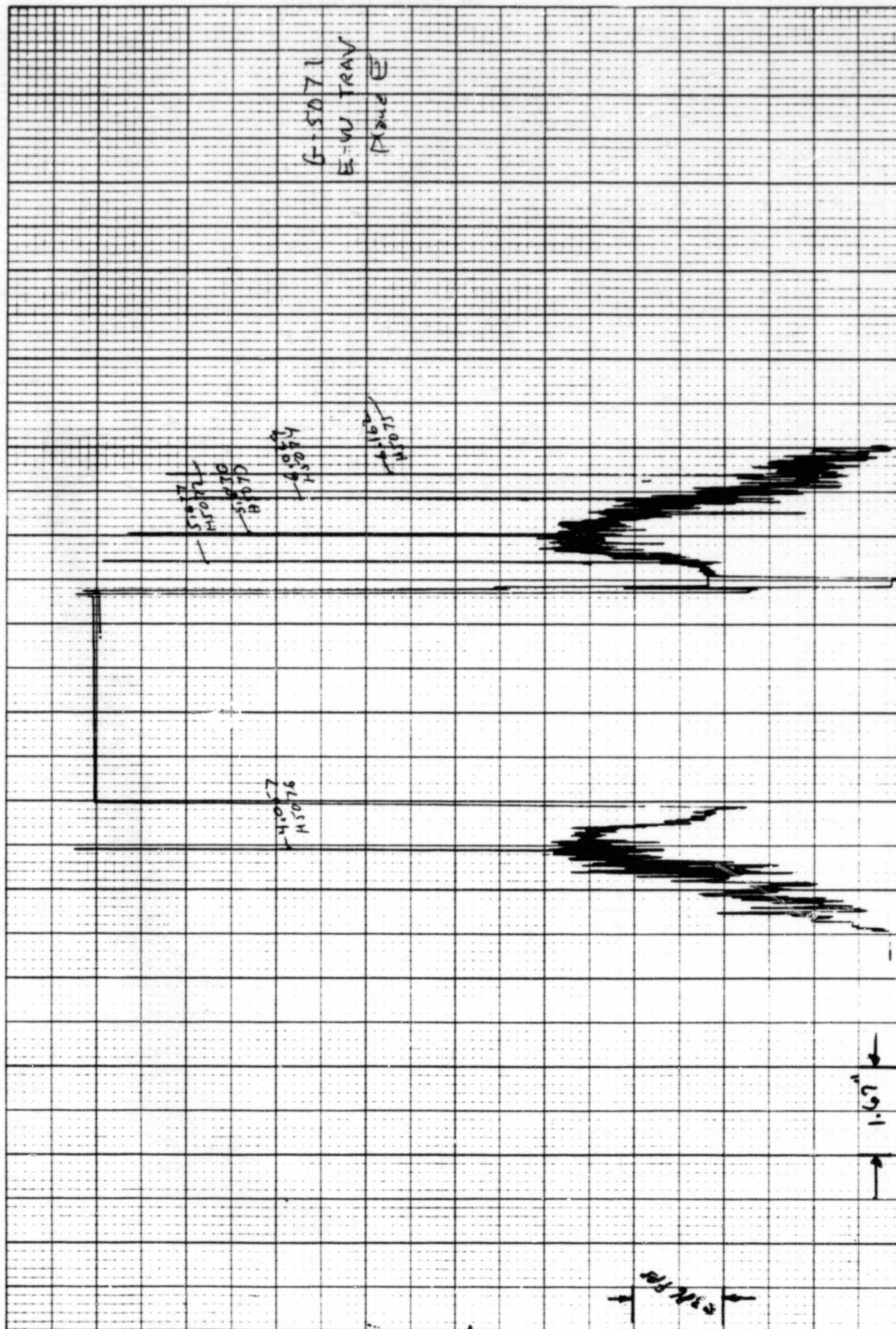
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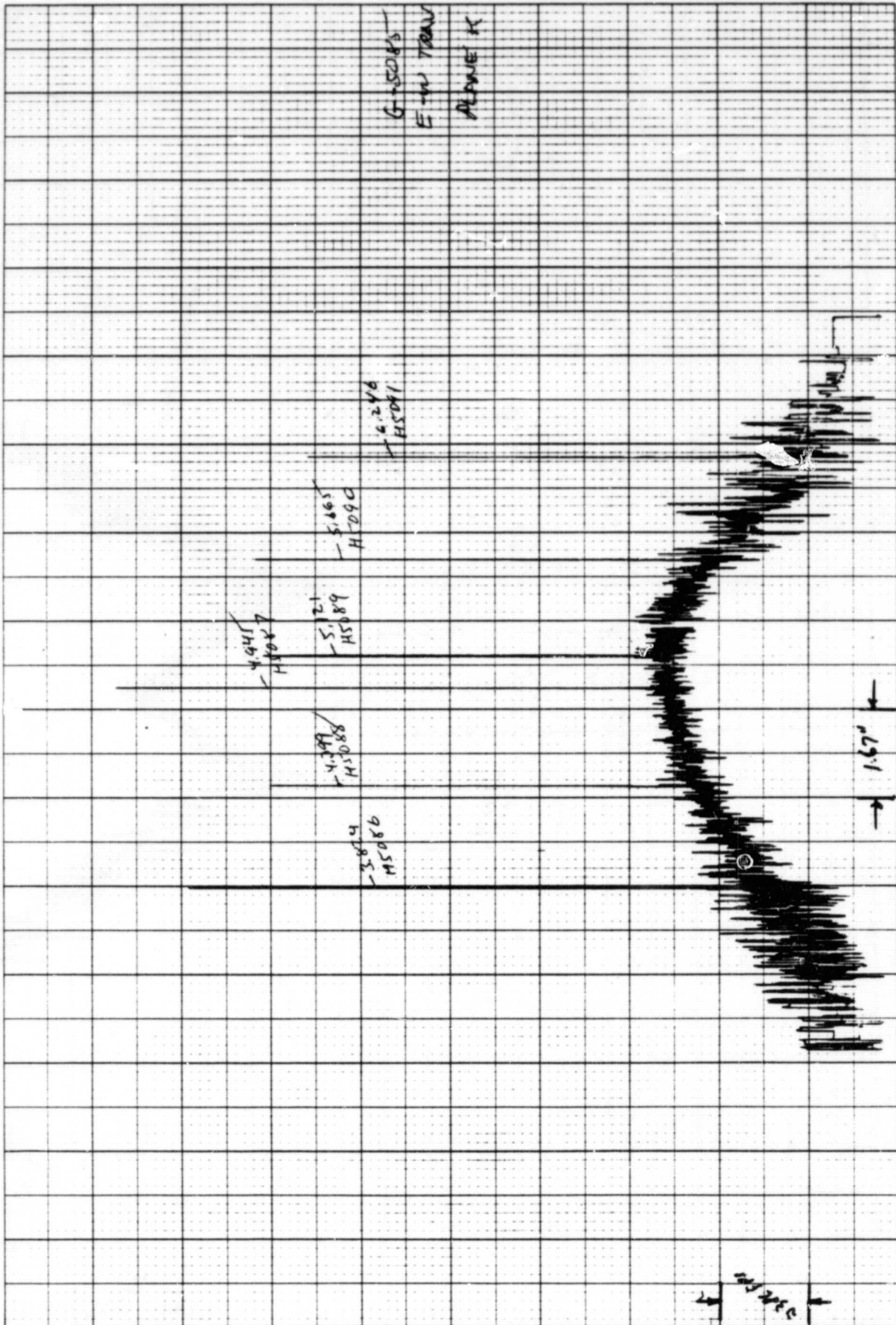




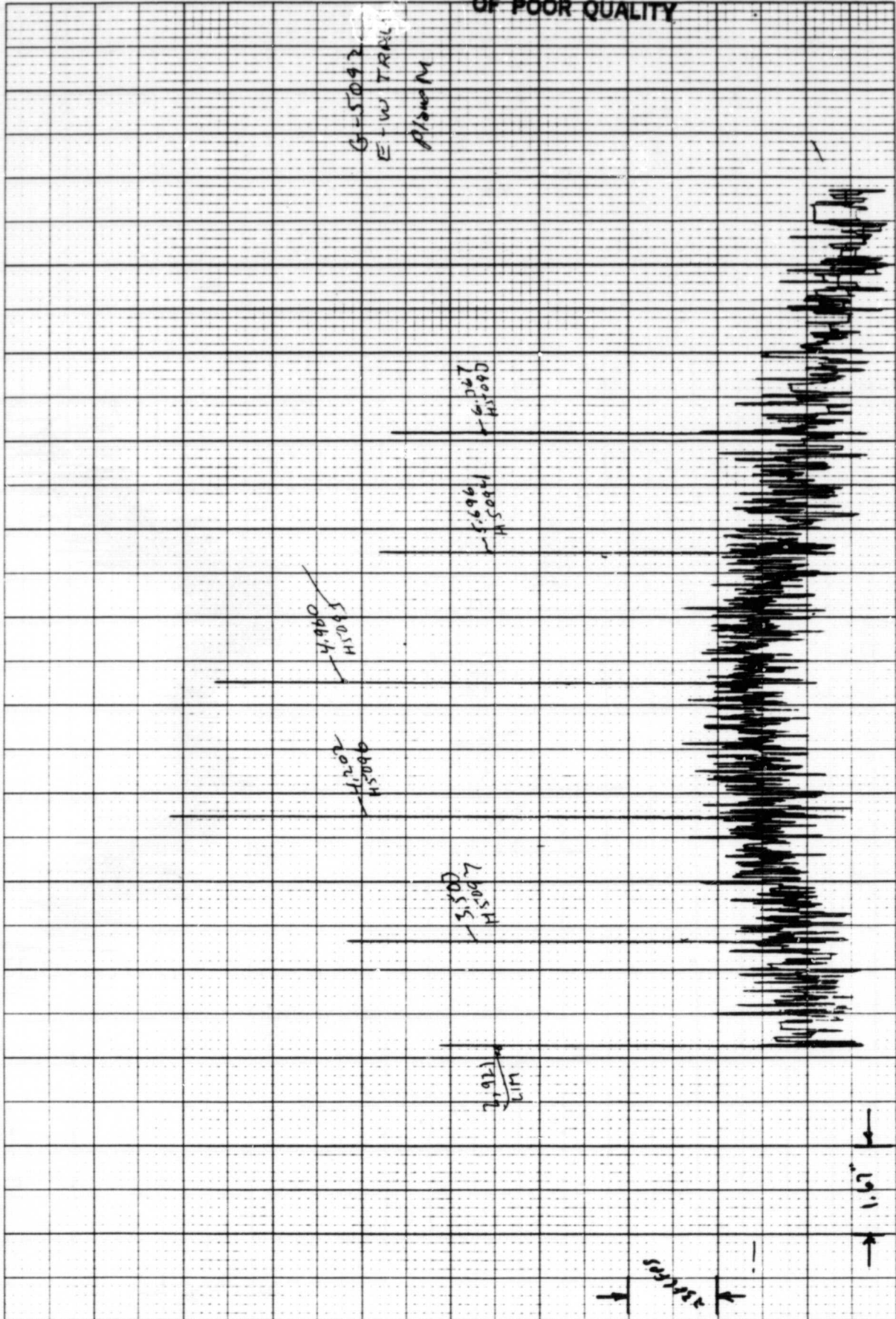
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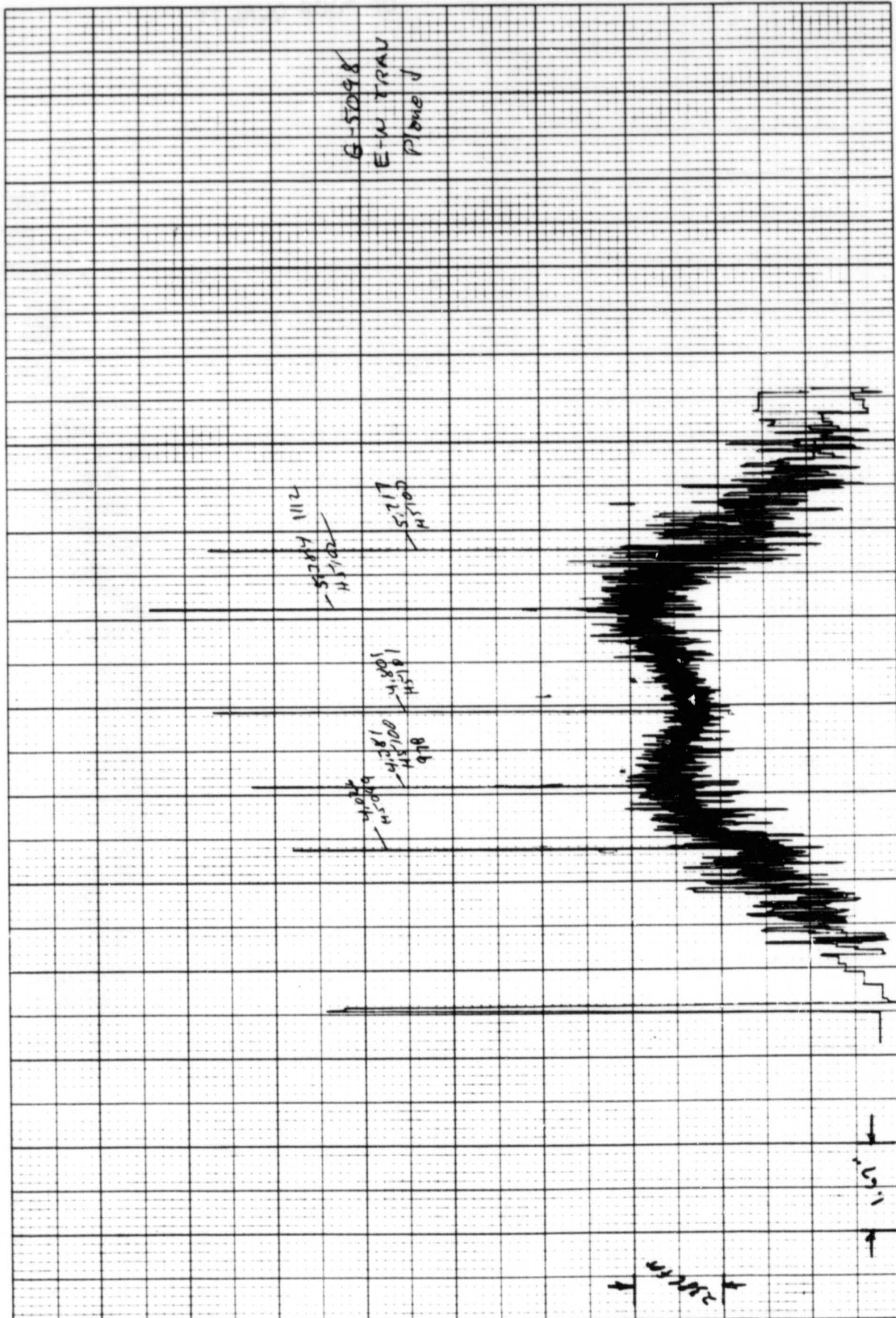


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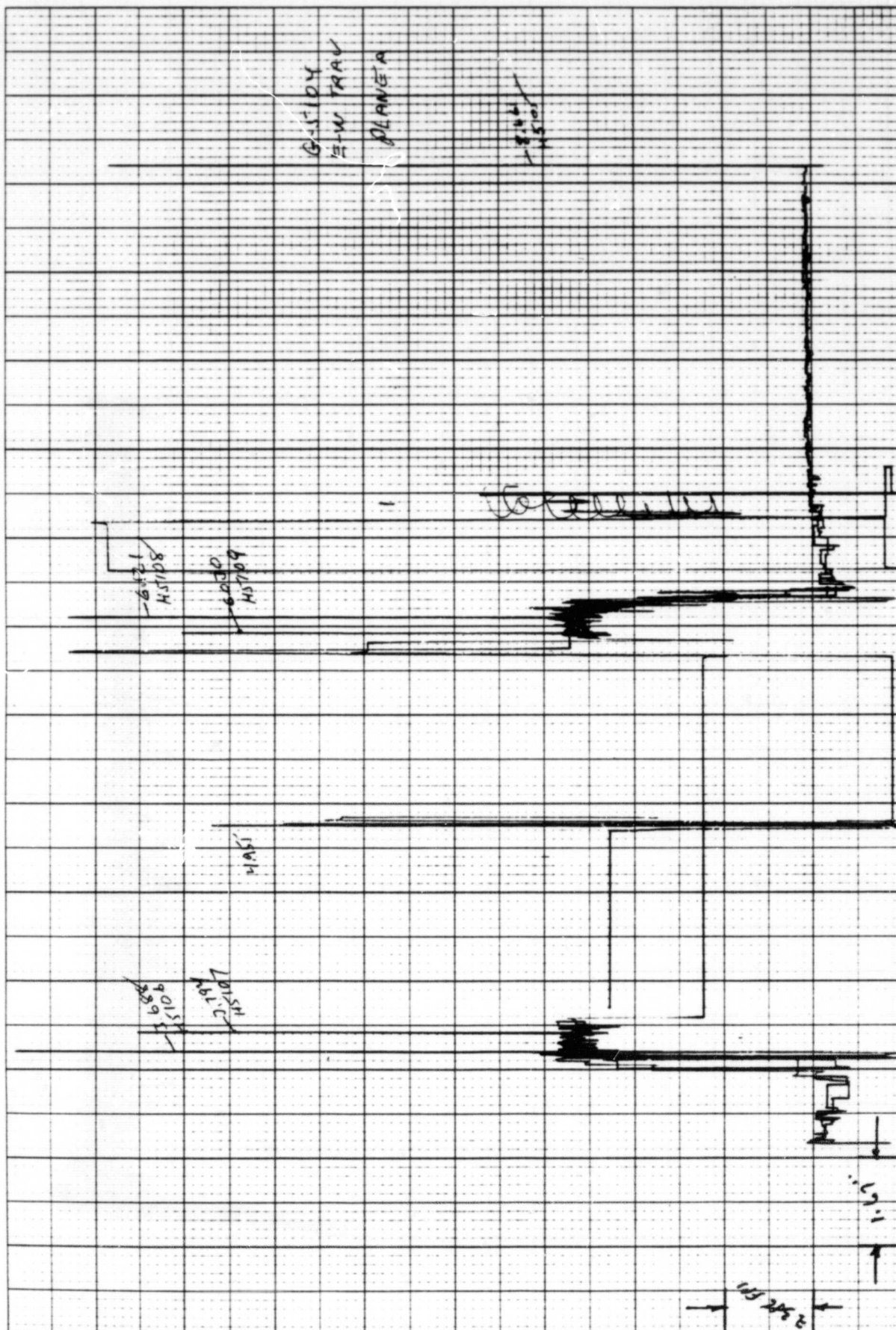


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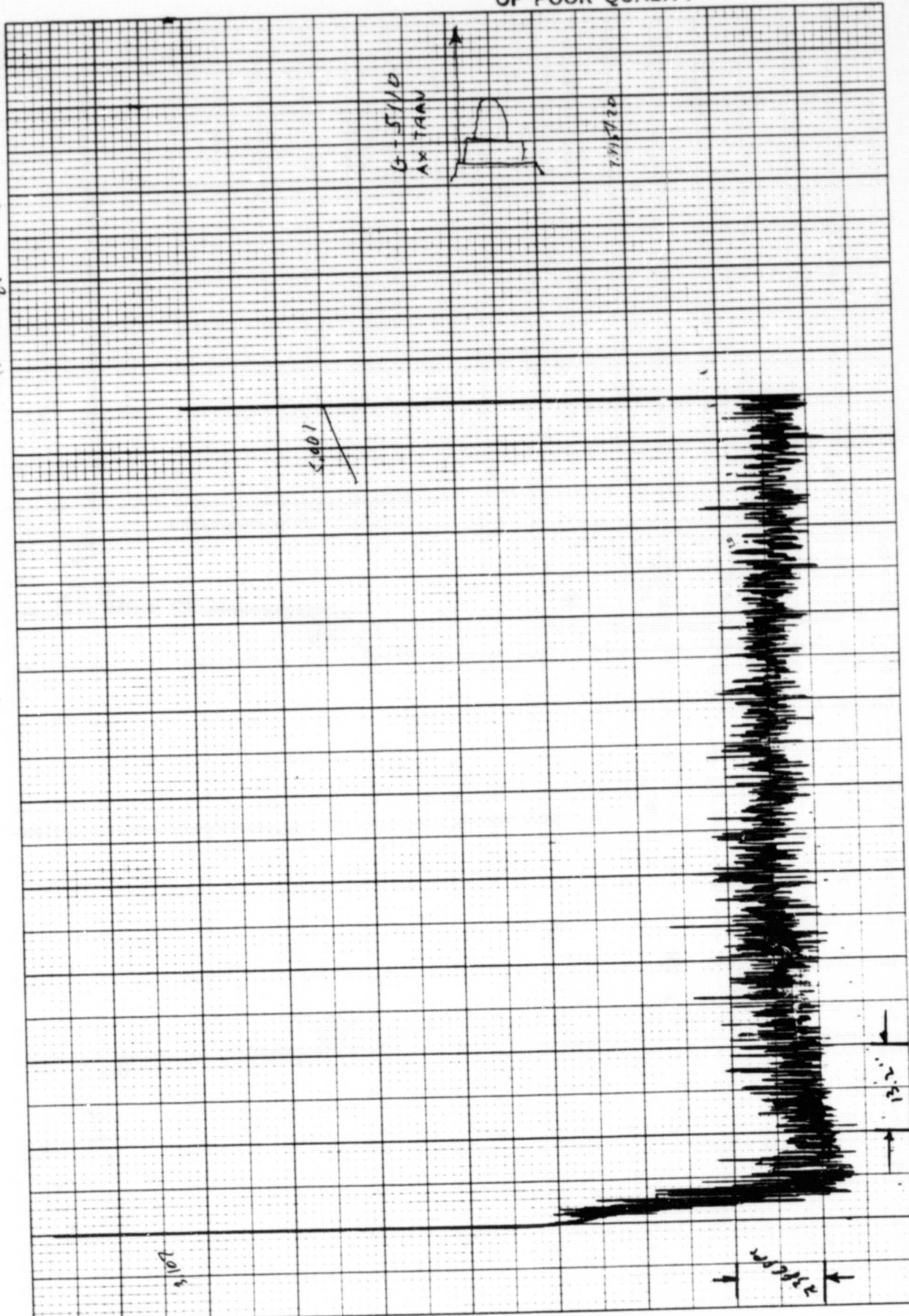




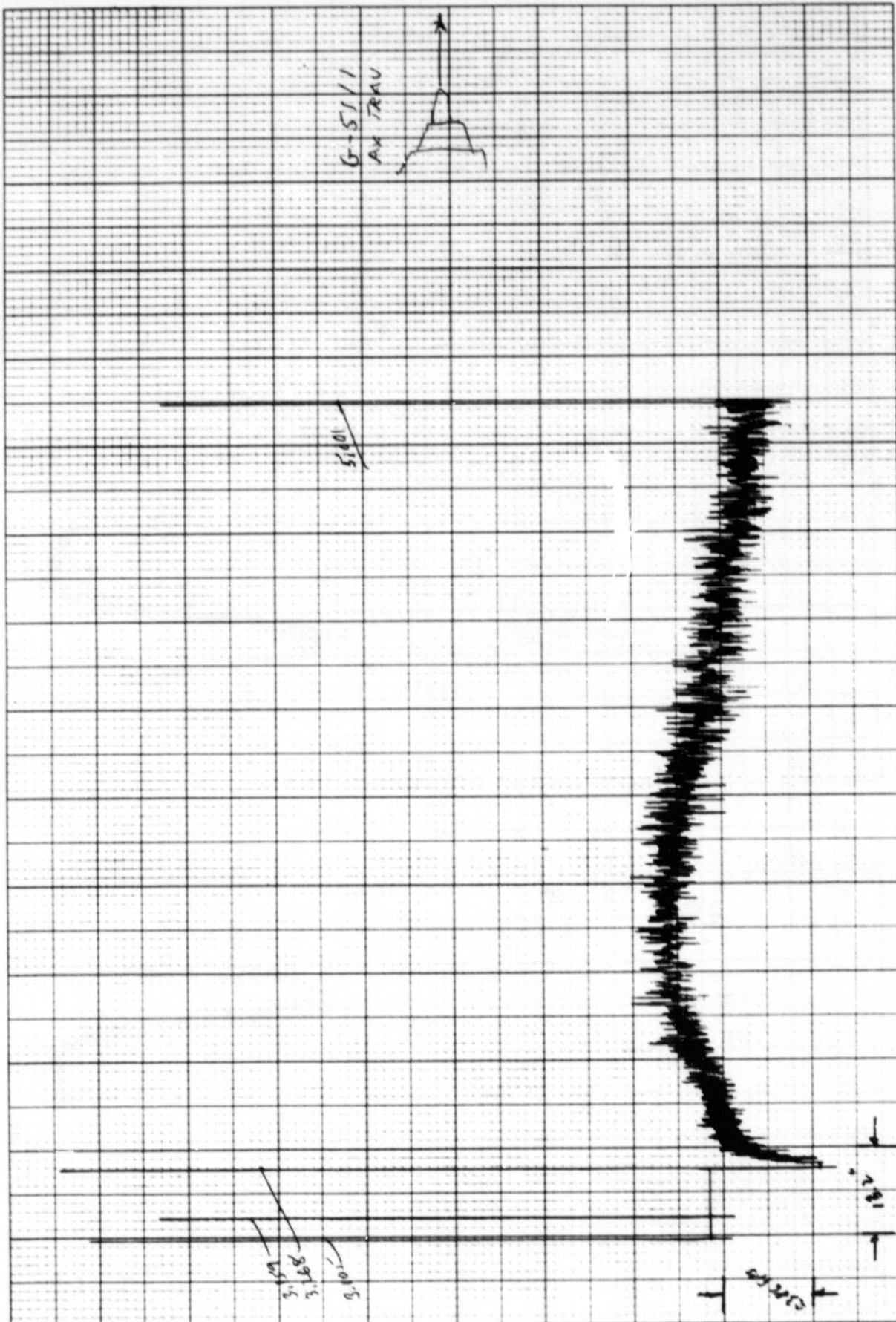
MODEL 1
TEST POINT 1506

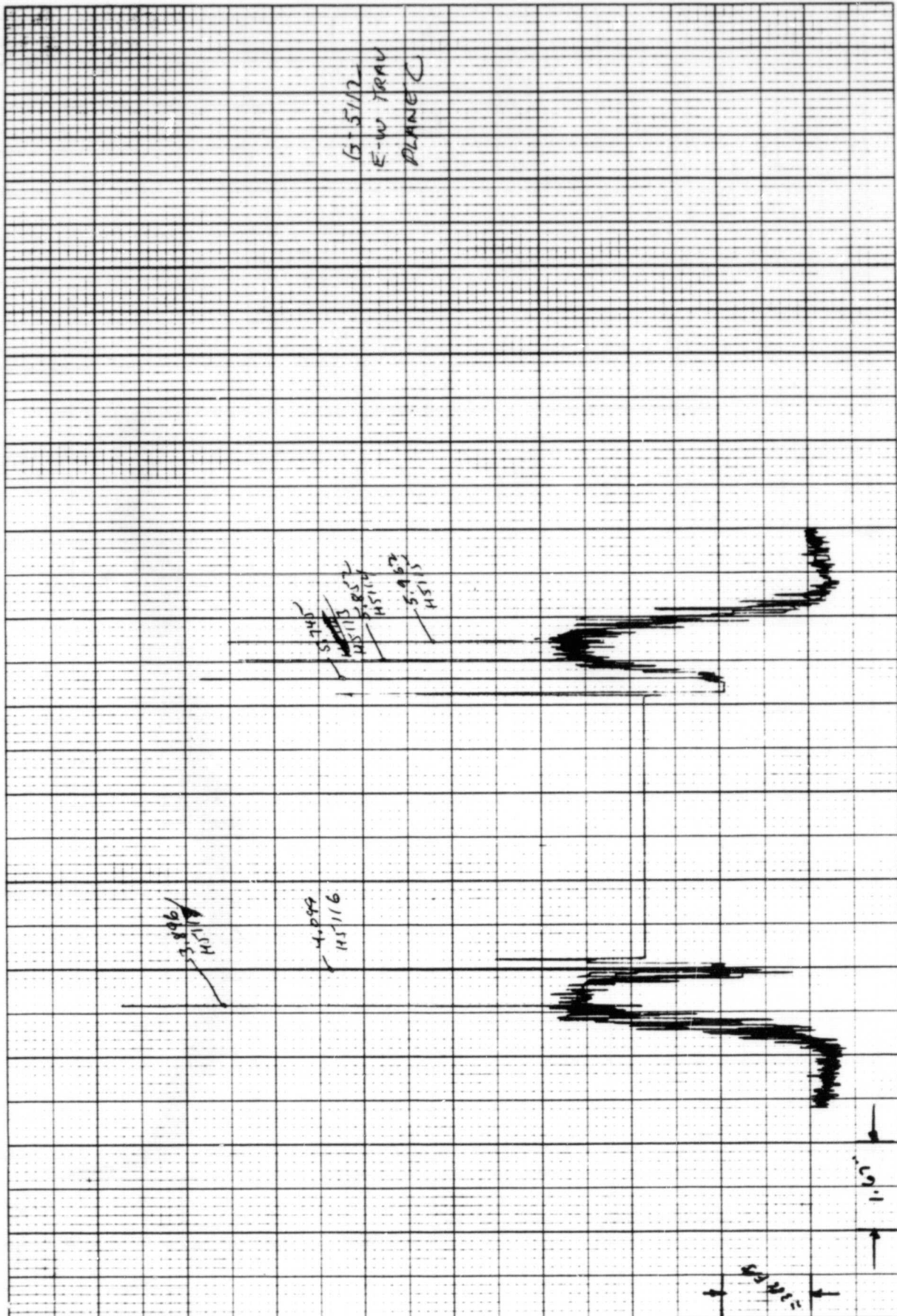


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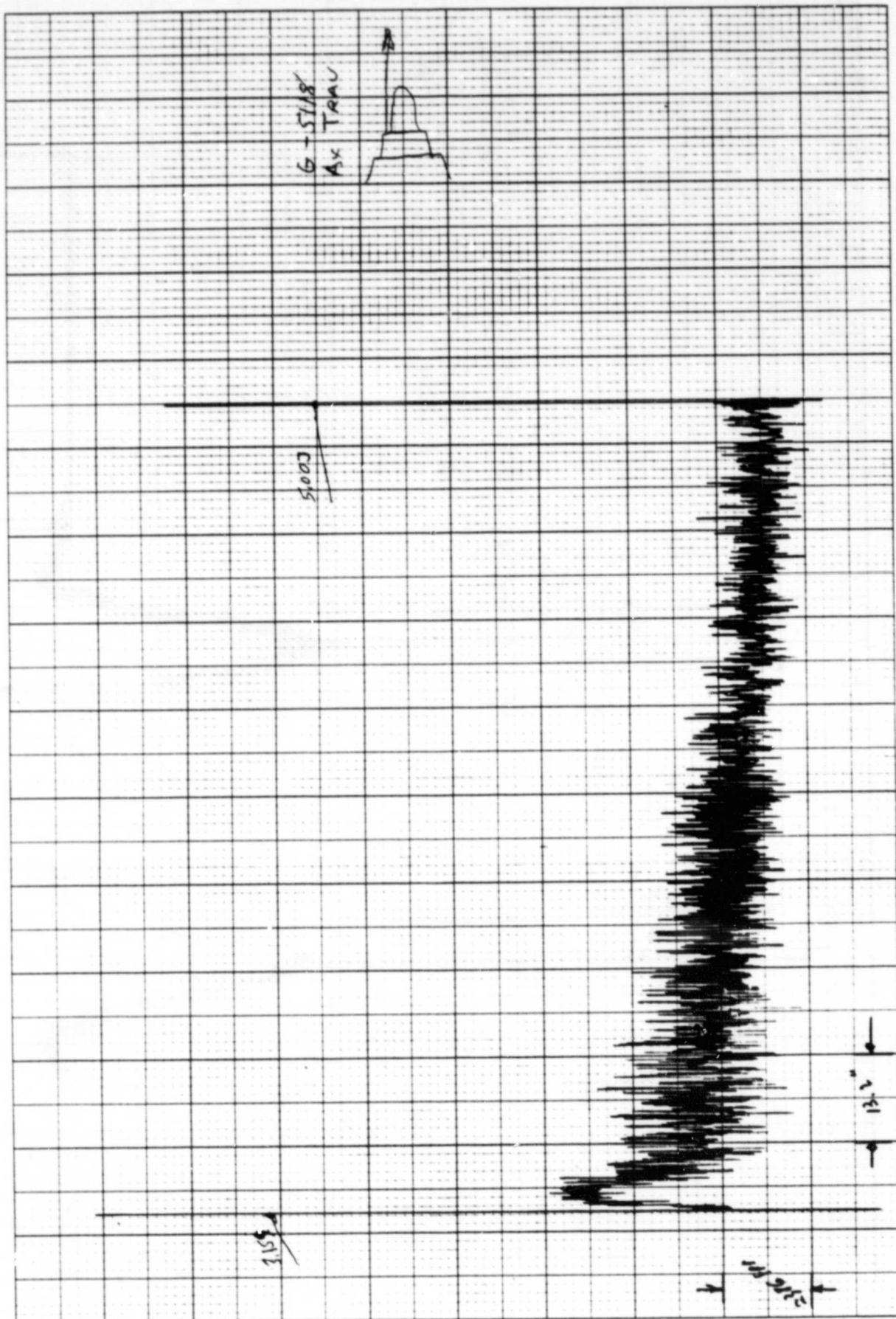


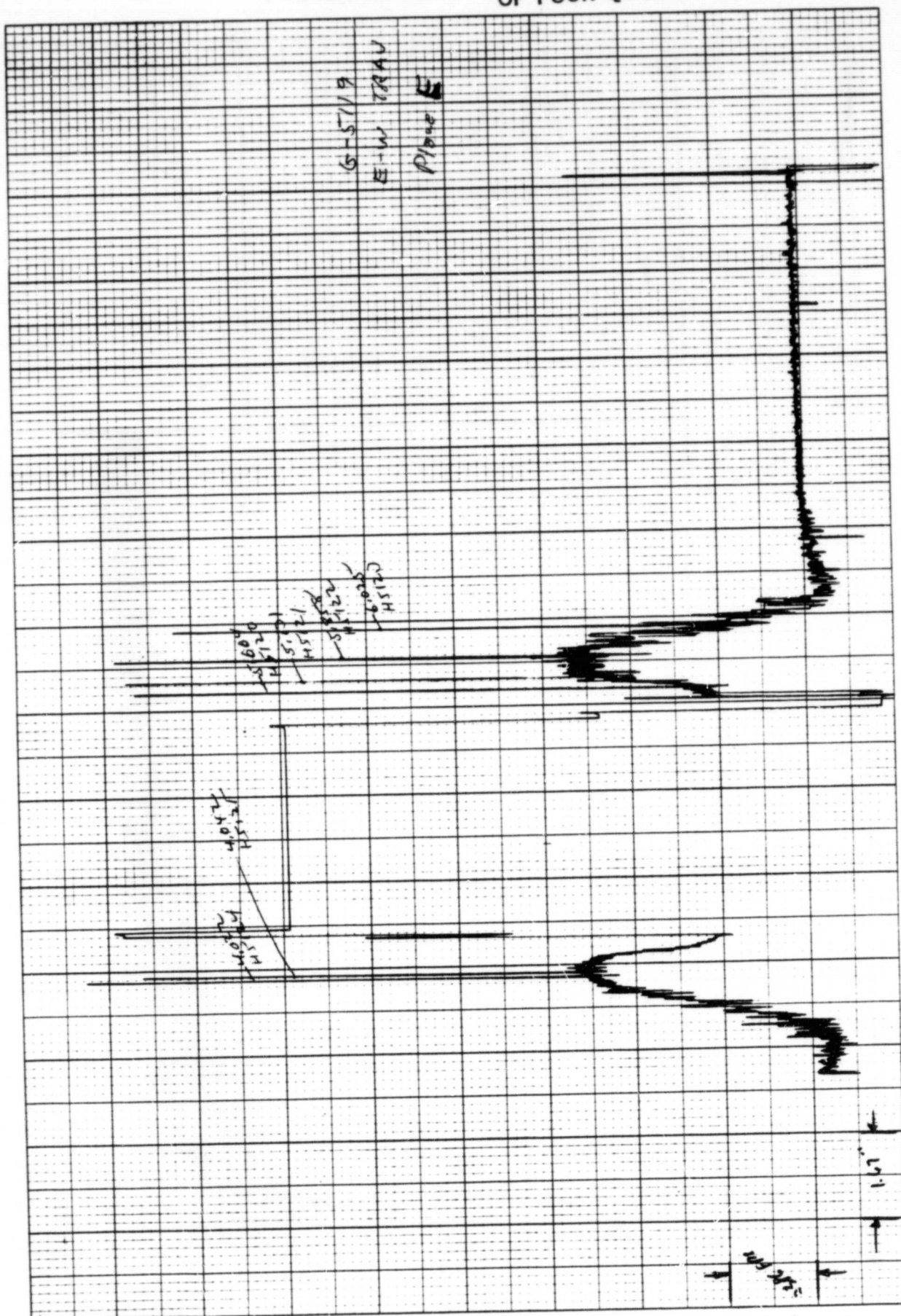
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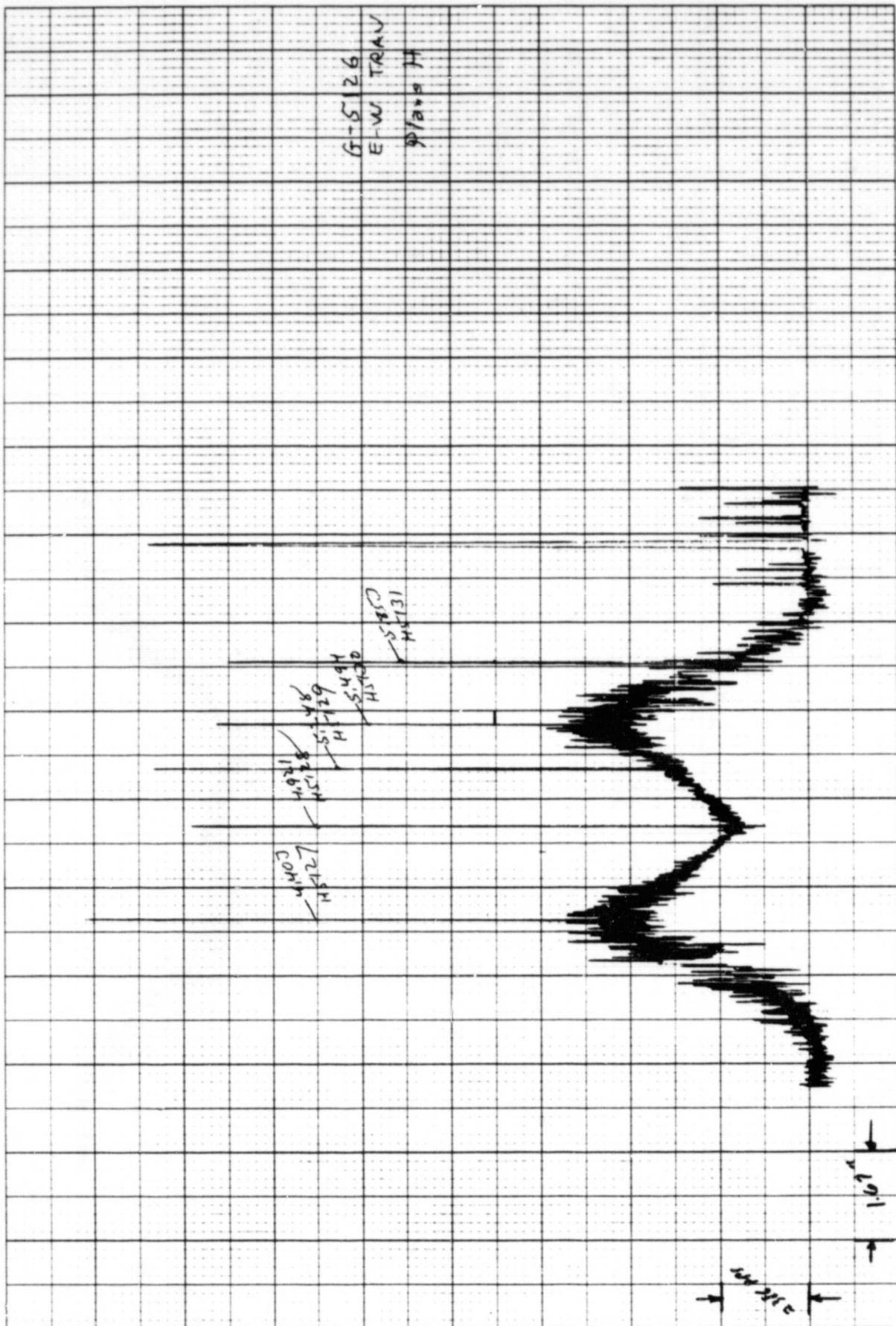




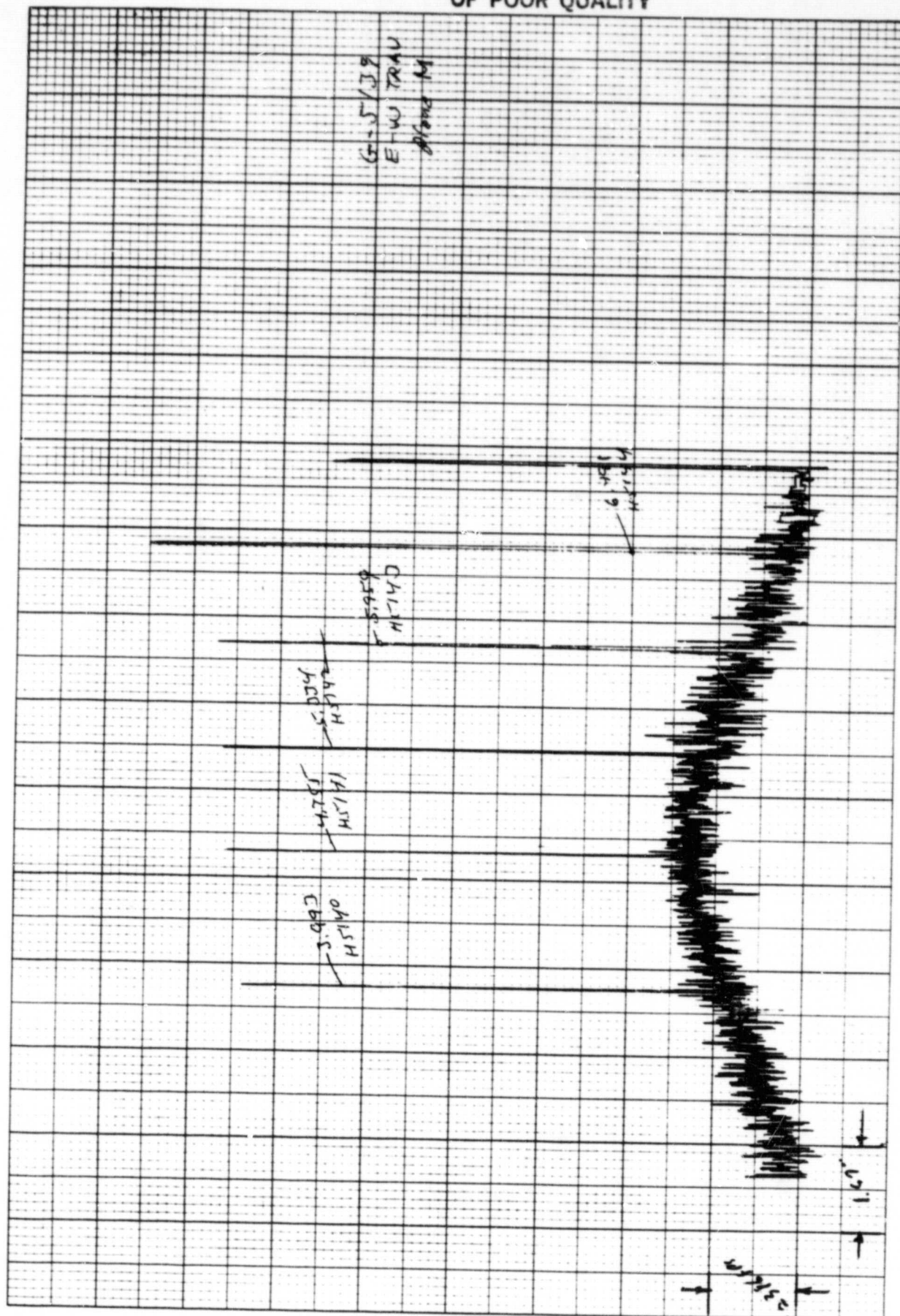
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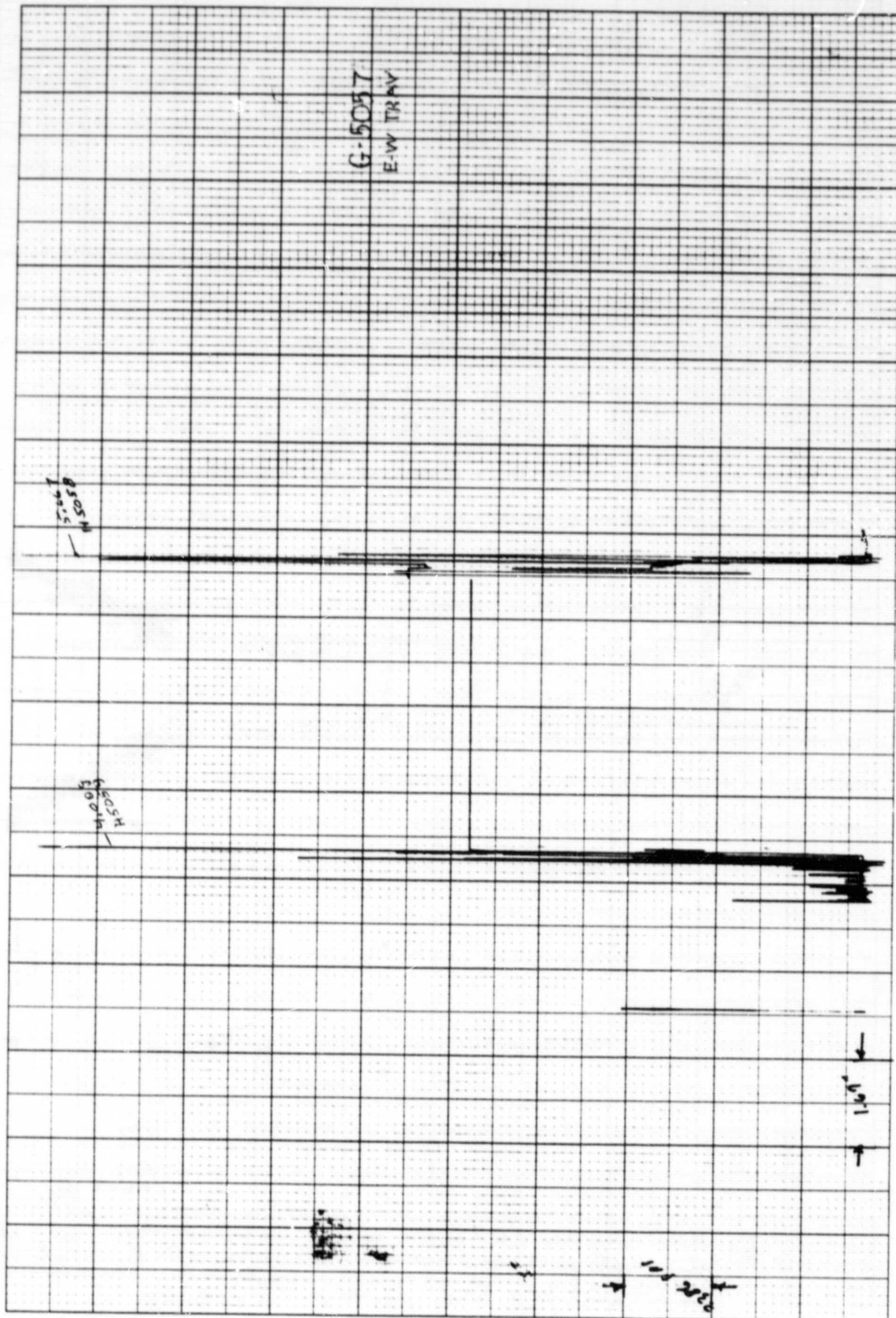


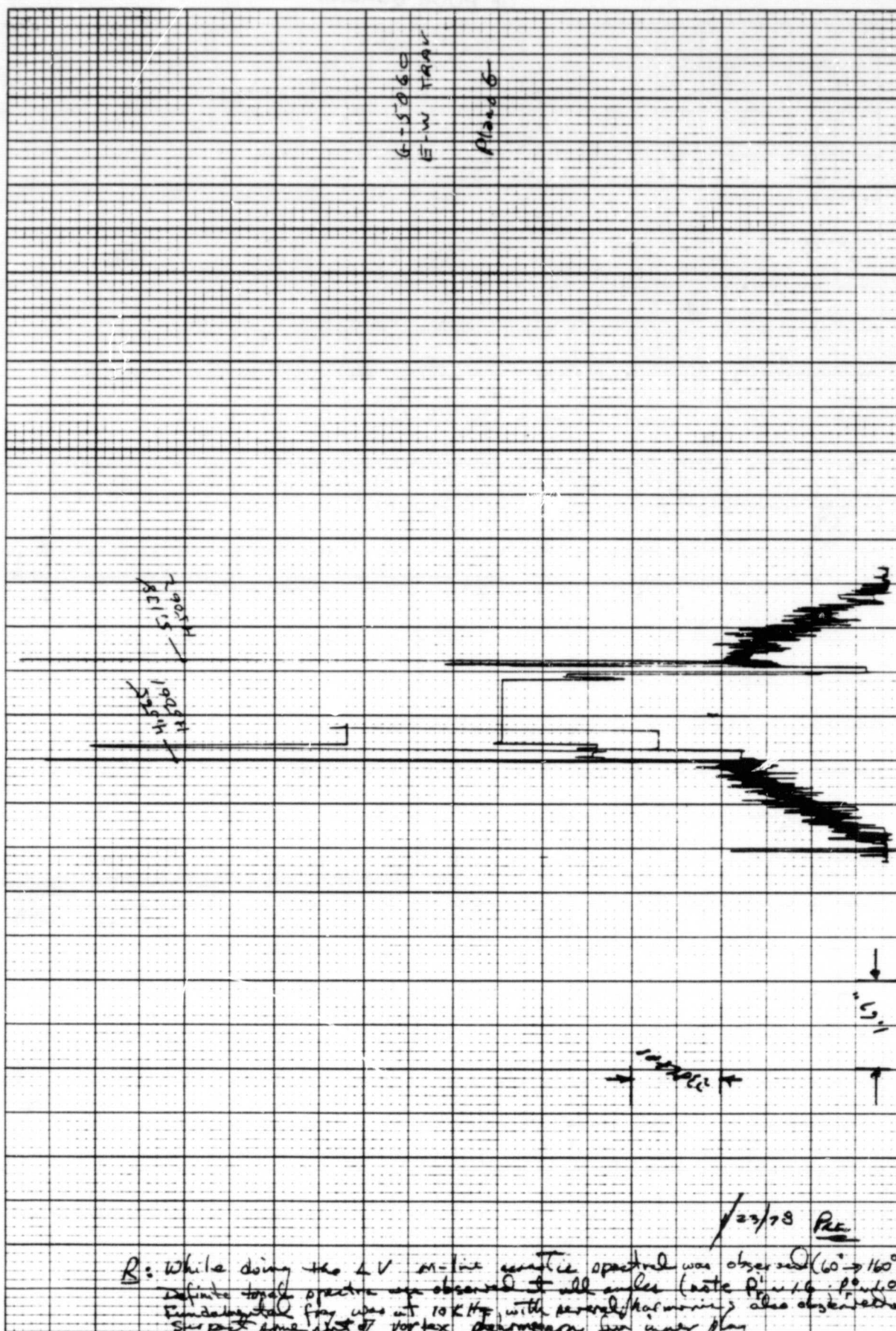
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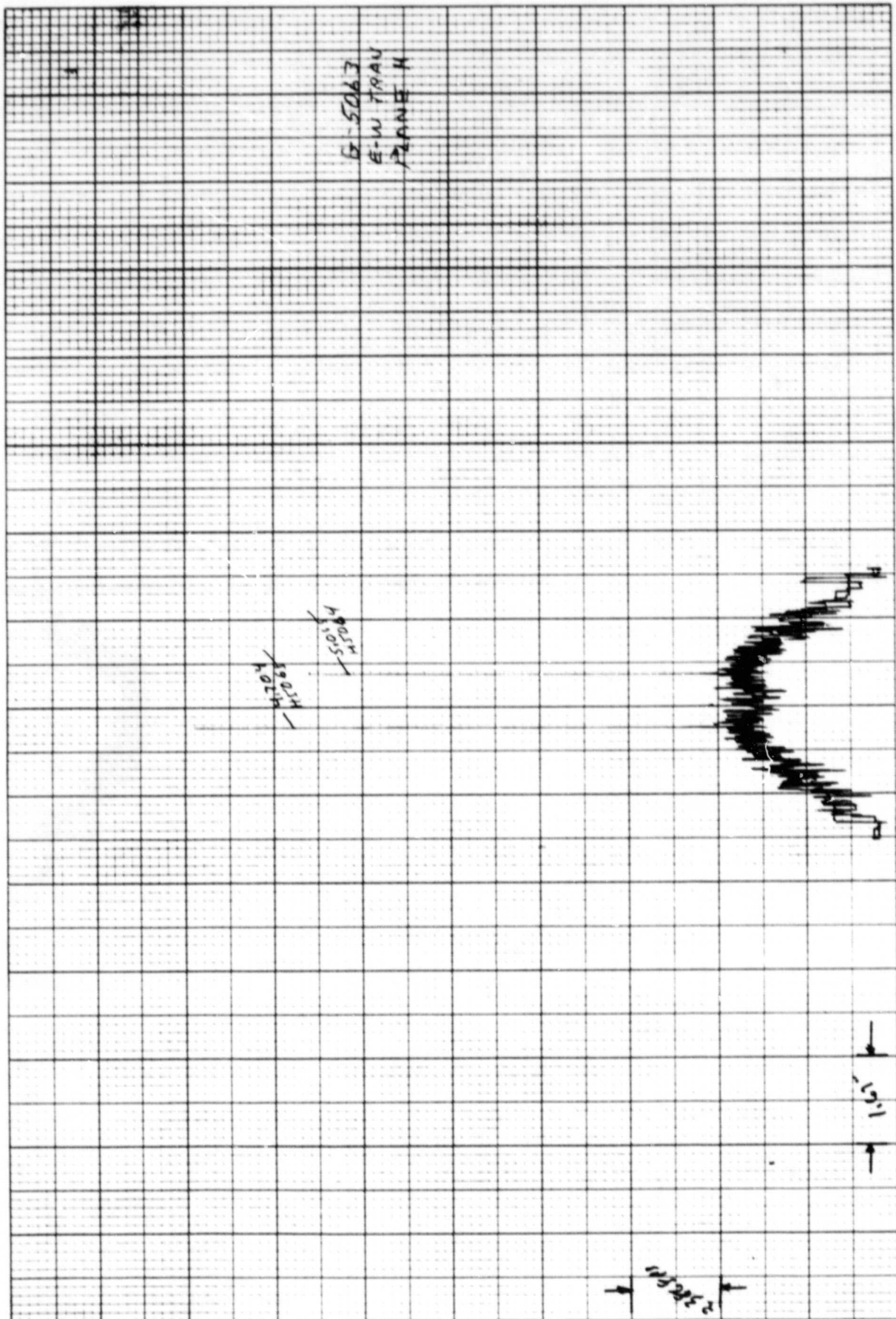
MODEL 1
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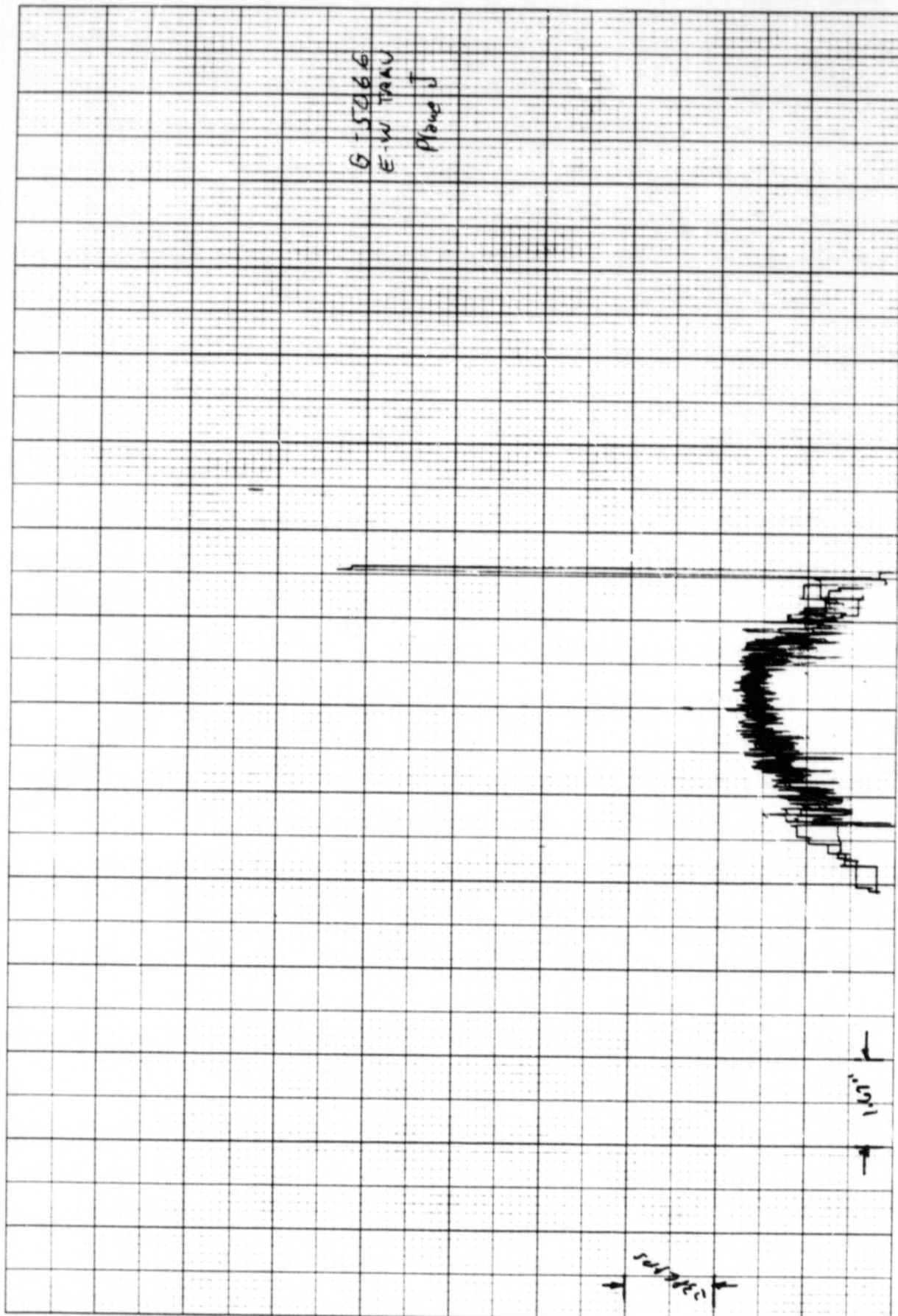




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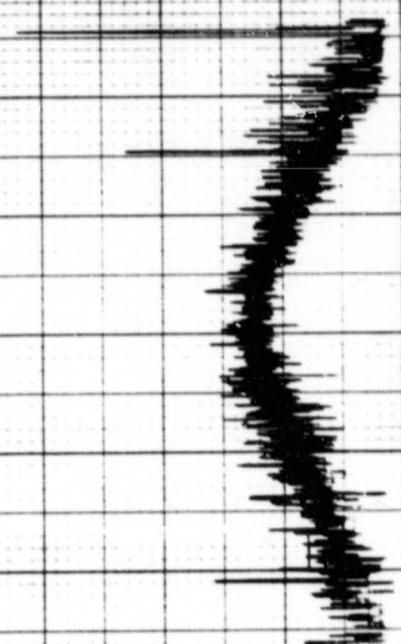


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G-5067
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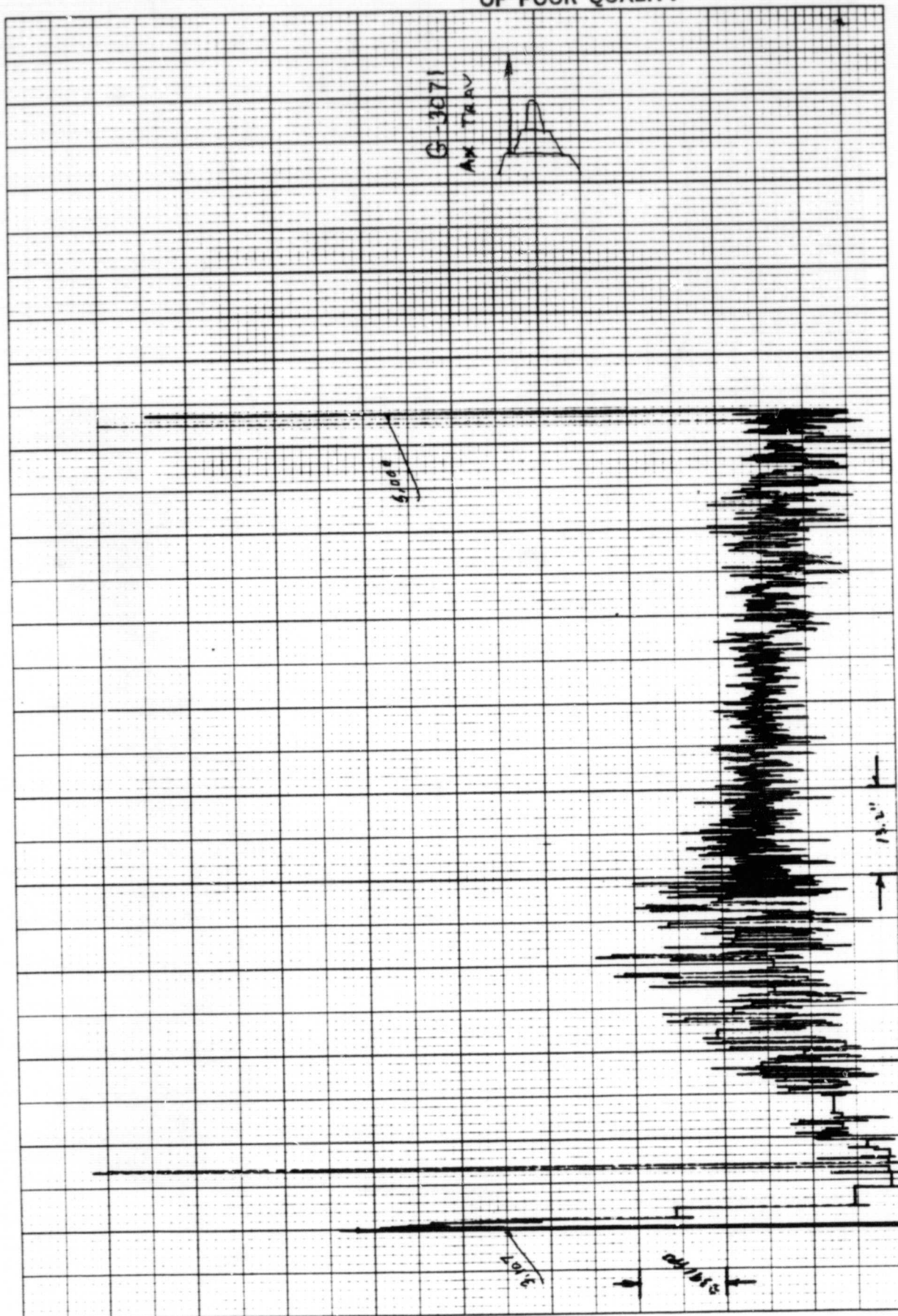


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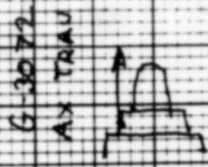
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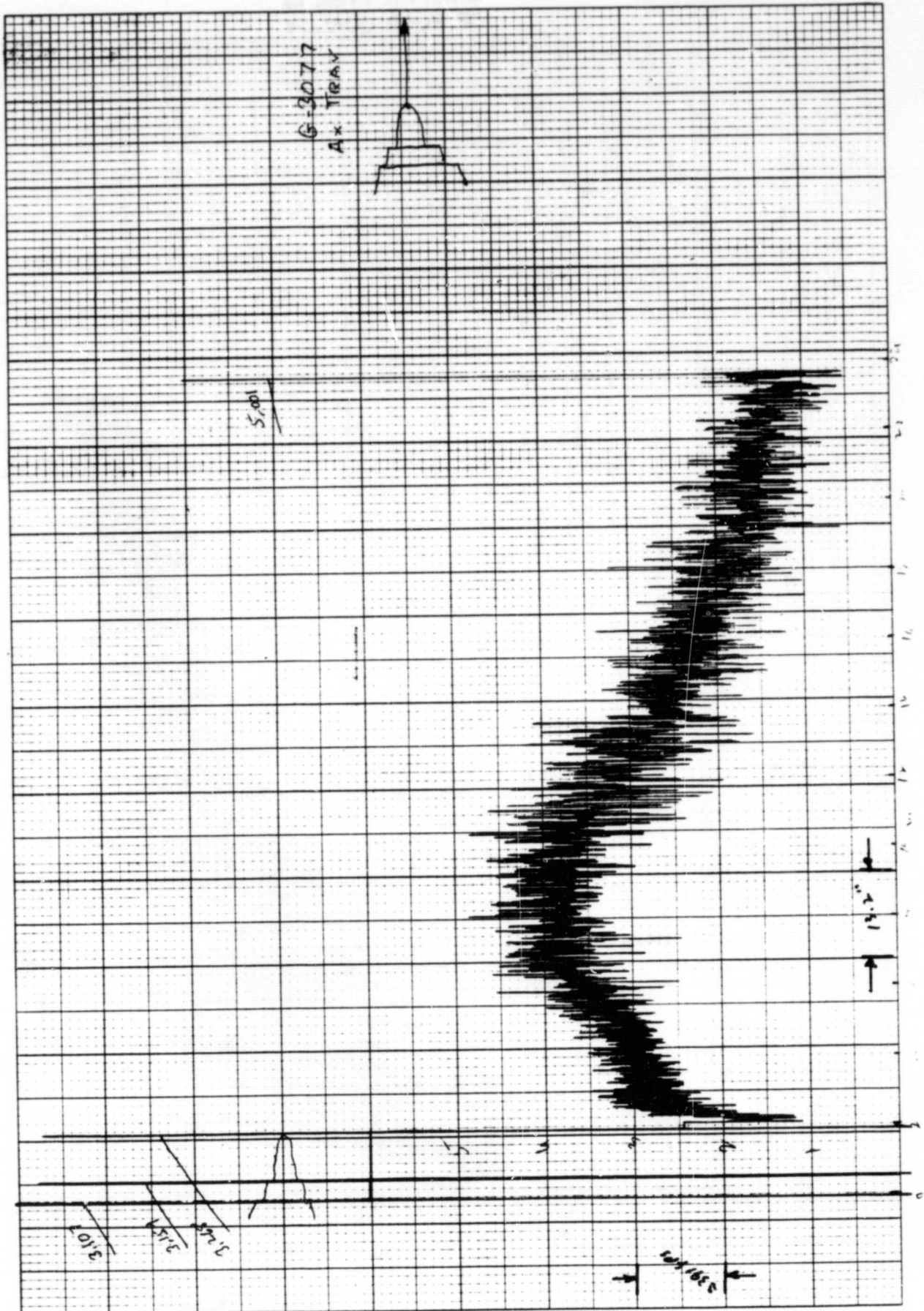
MODEL 1
TEST POINT 116

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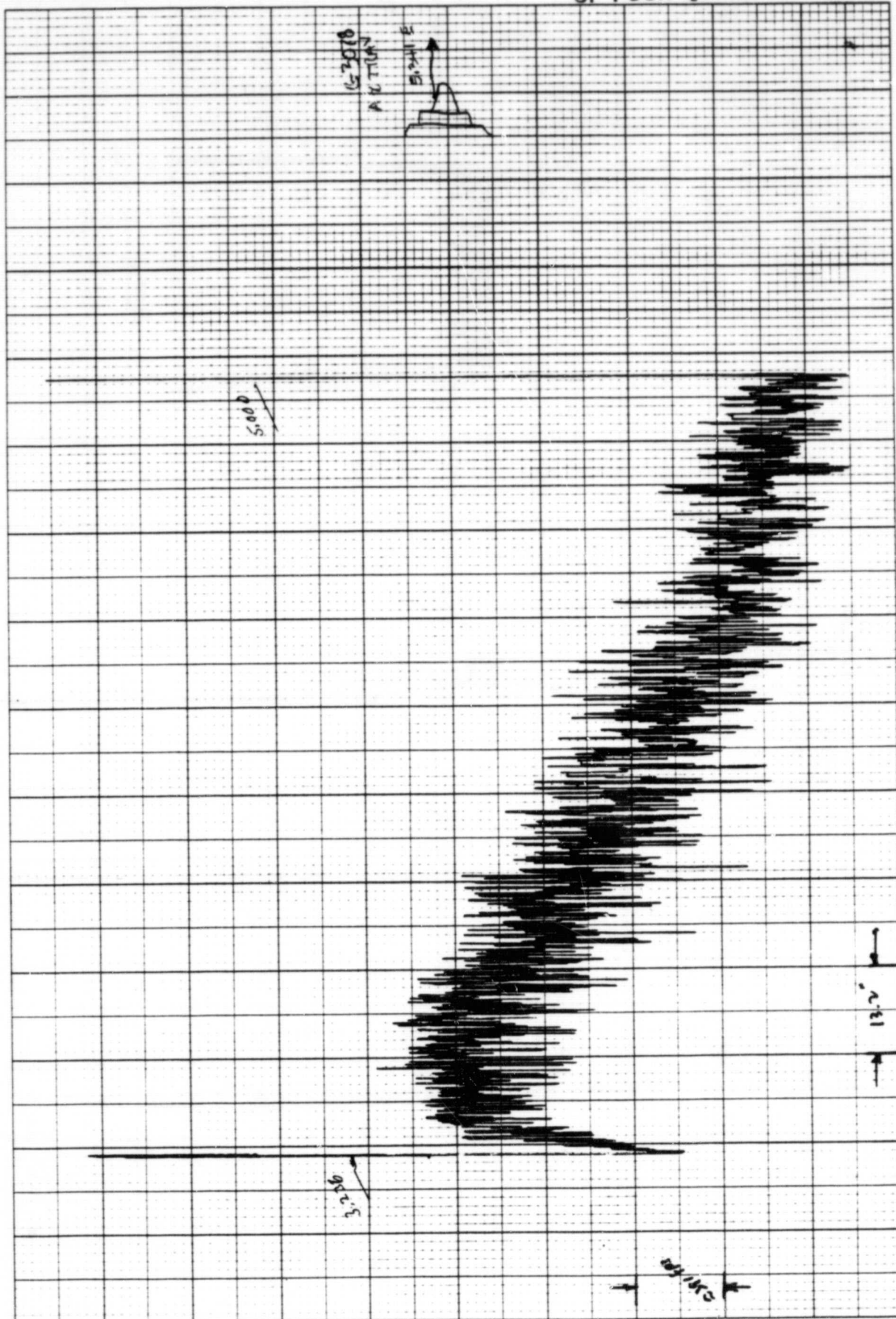


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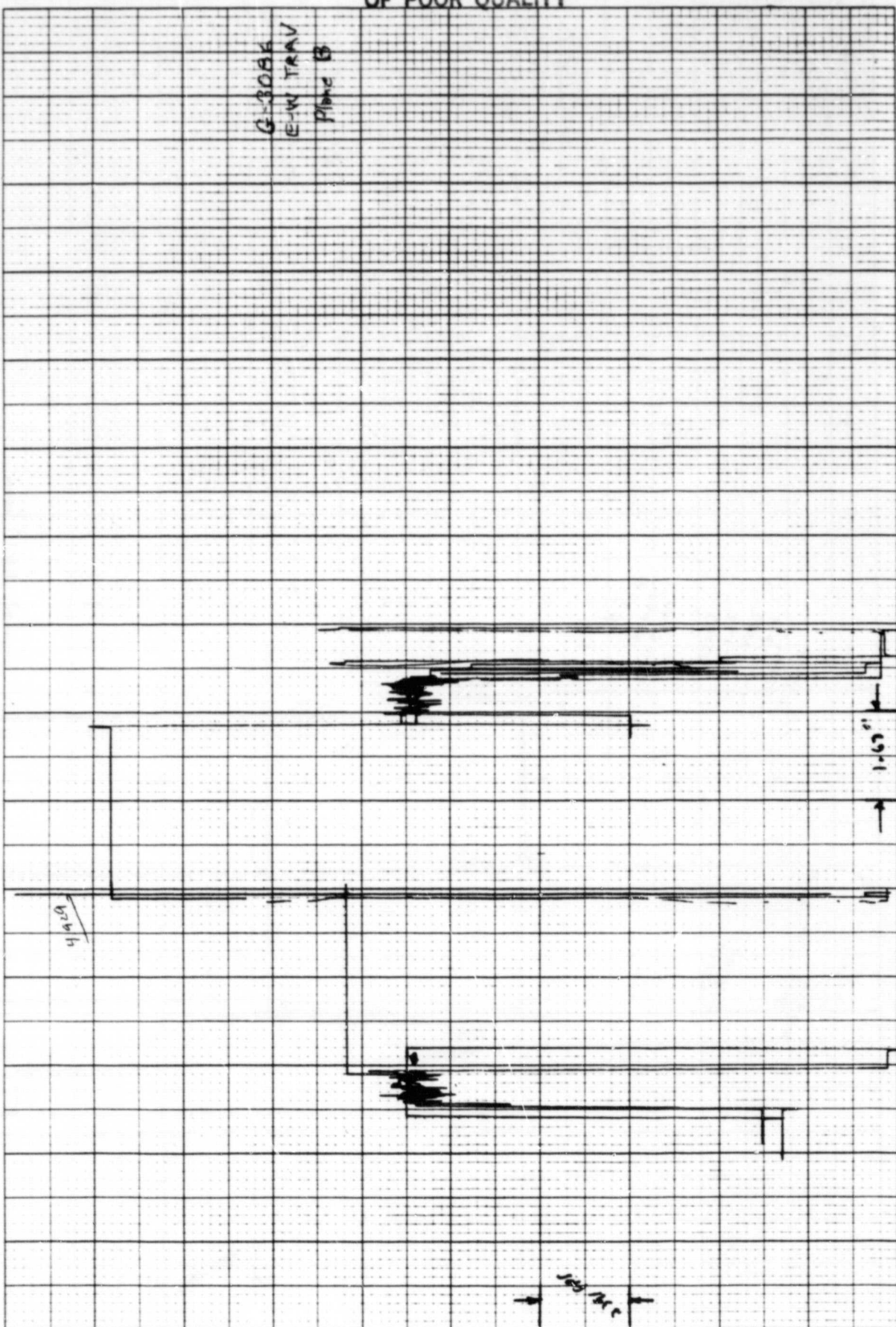


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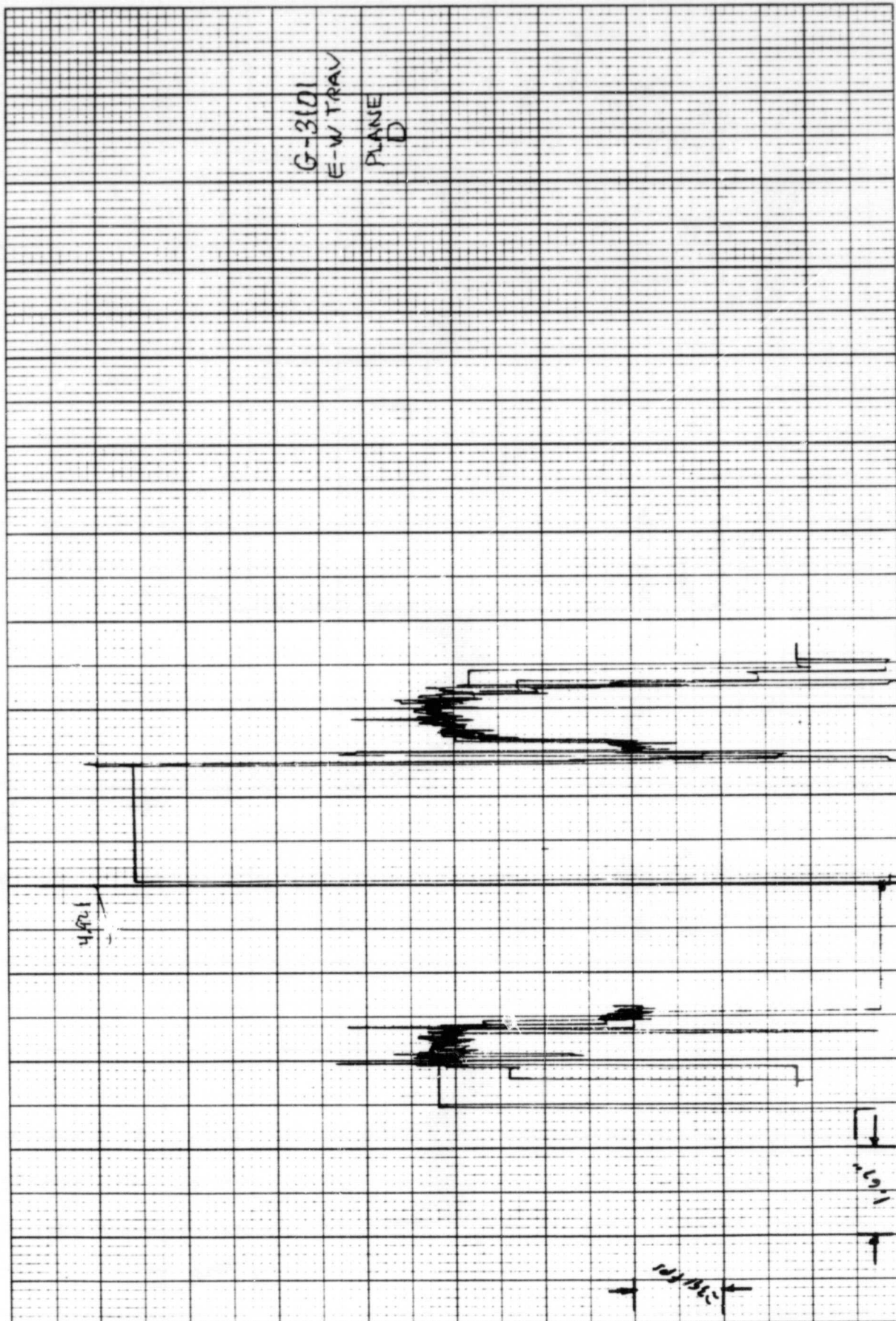
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G-3086
E-W TRAV
Plate B



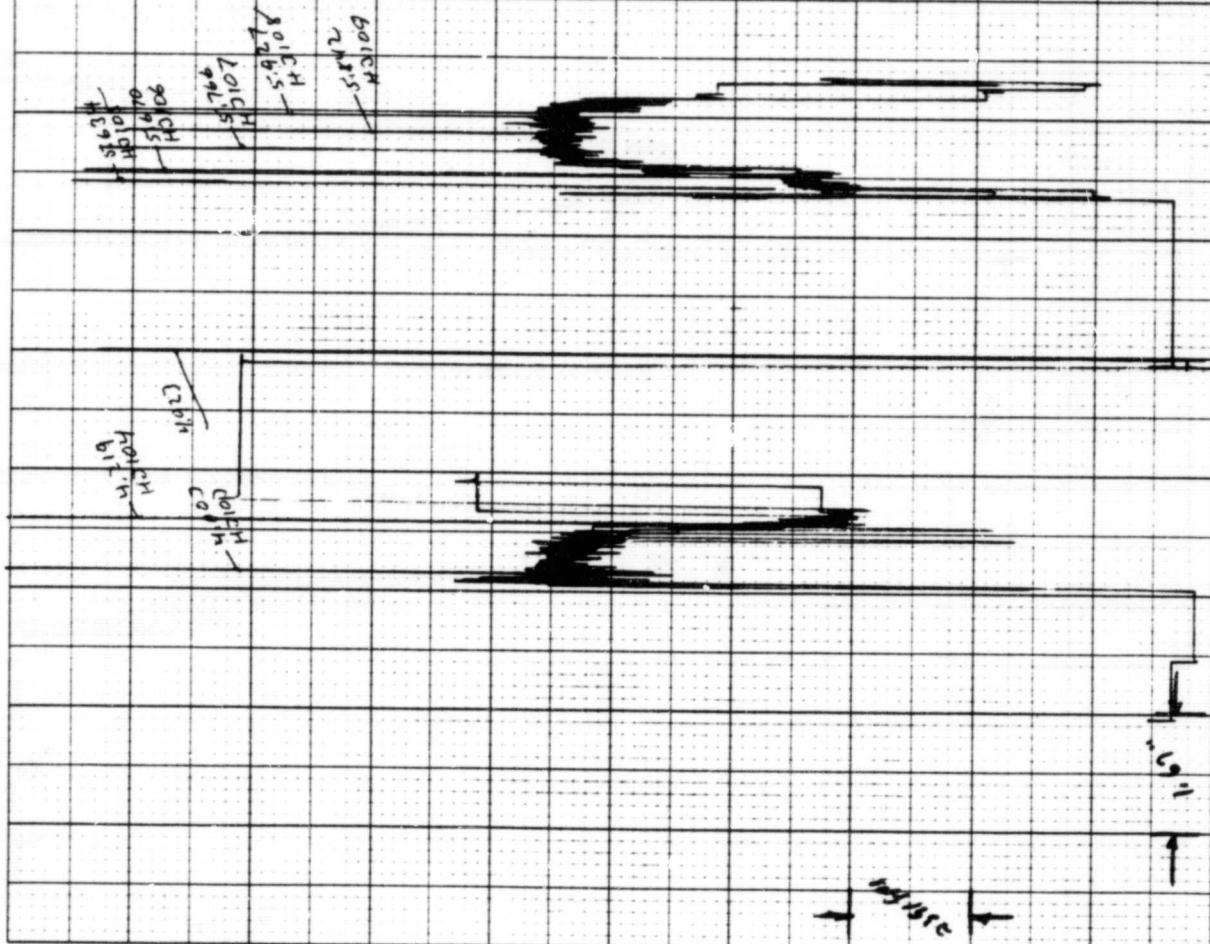
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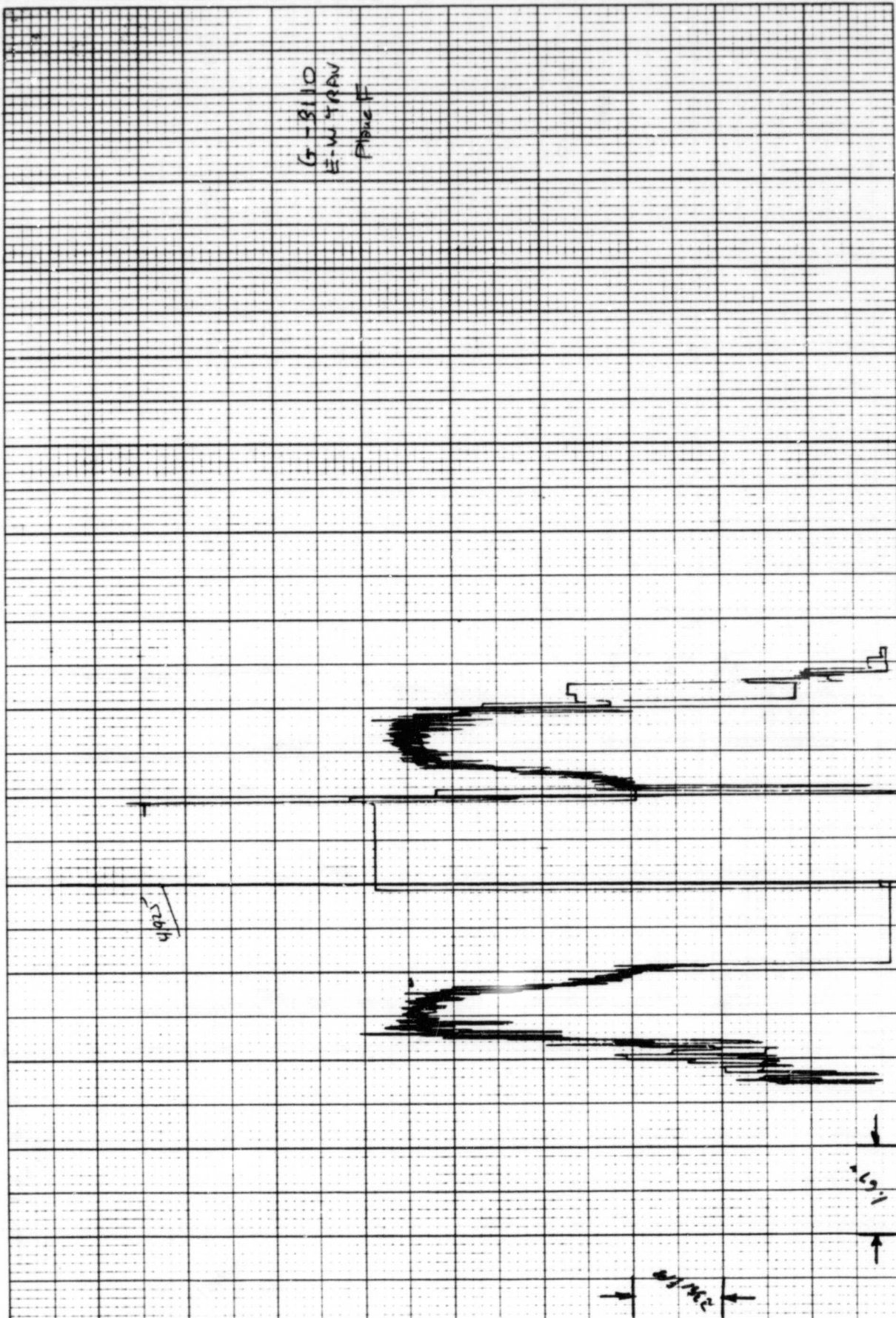


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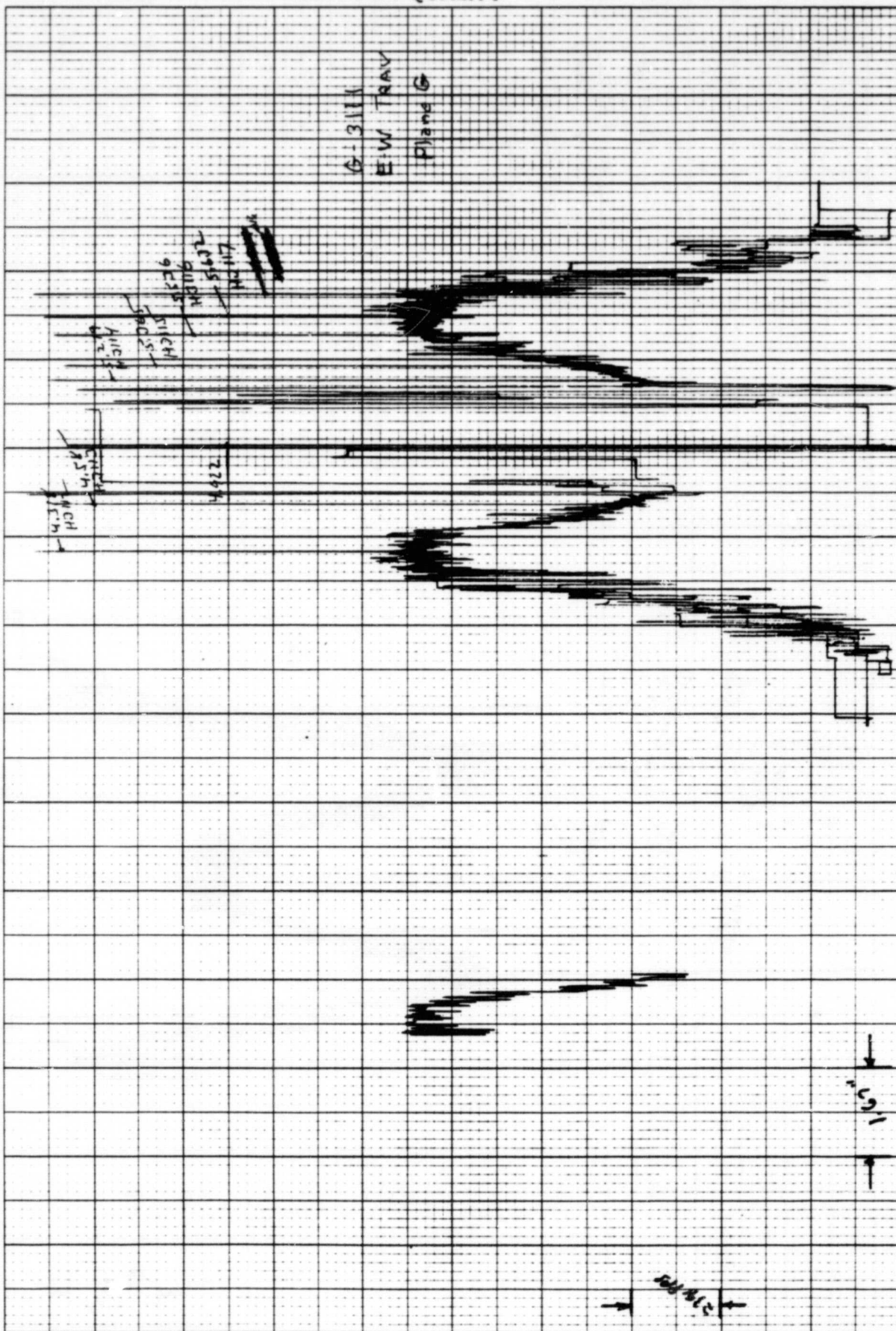
8-3102
E-W TRAV
Plane E

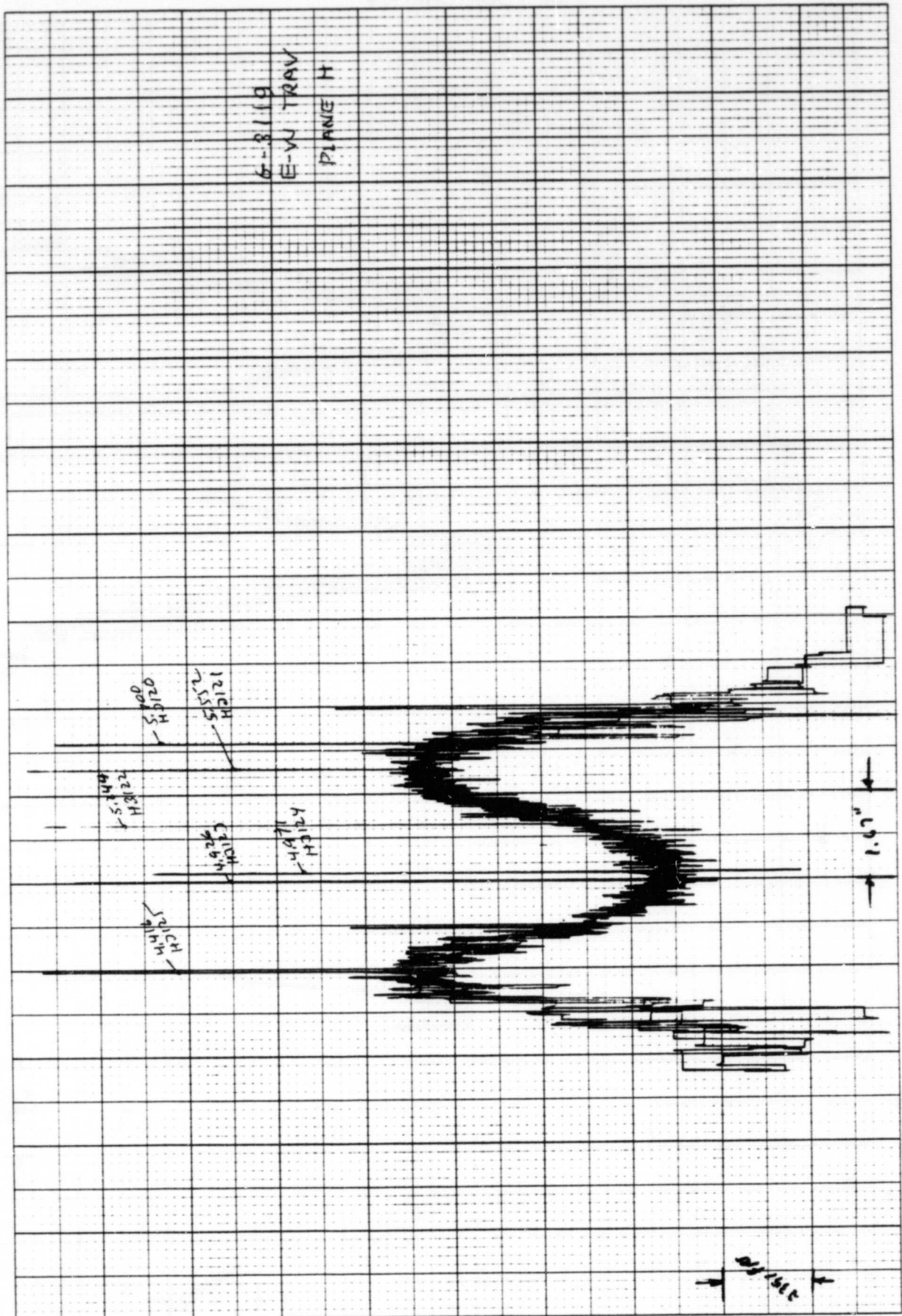


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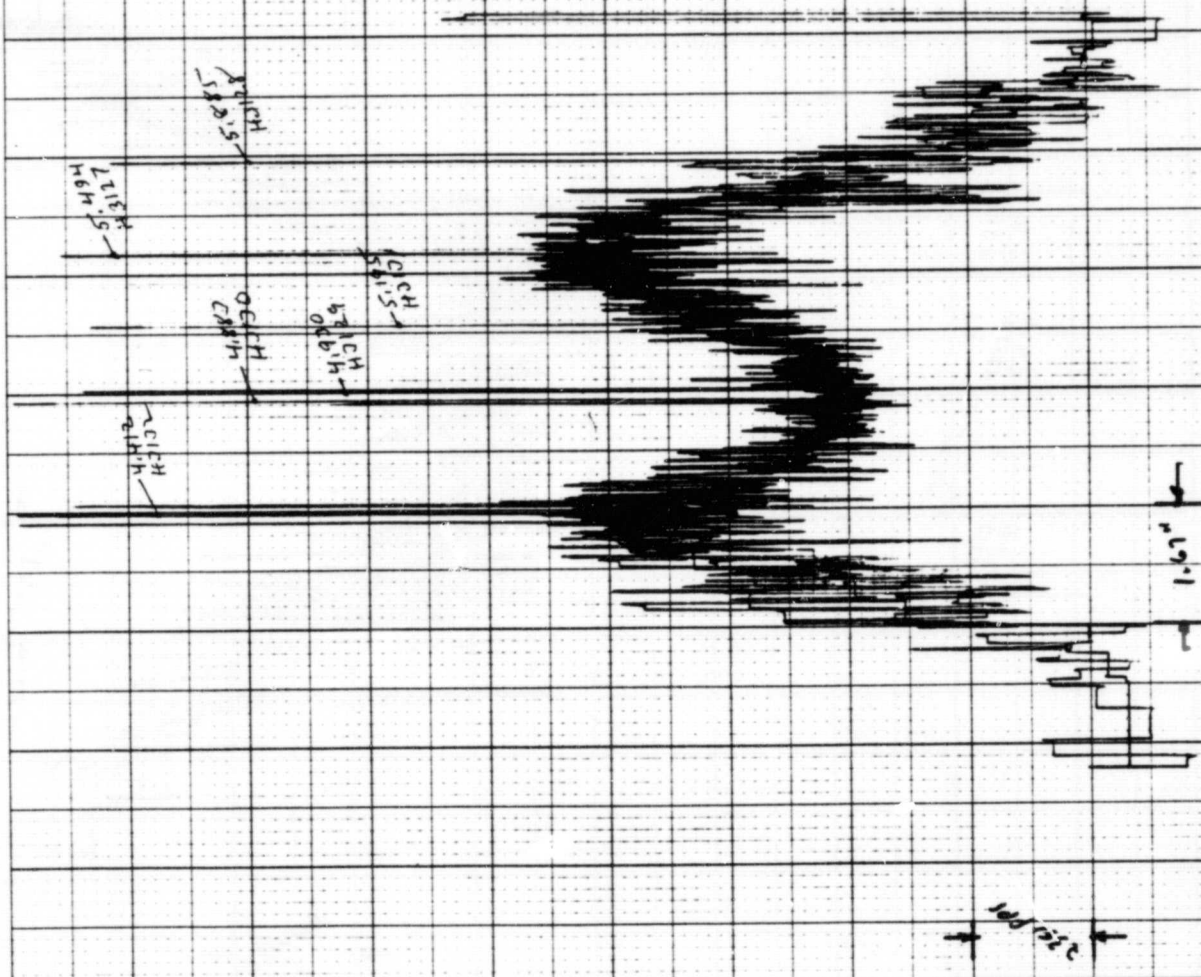
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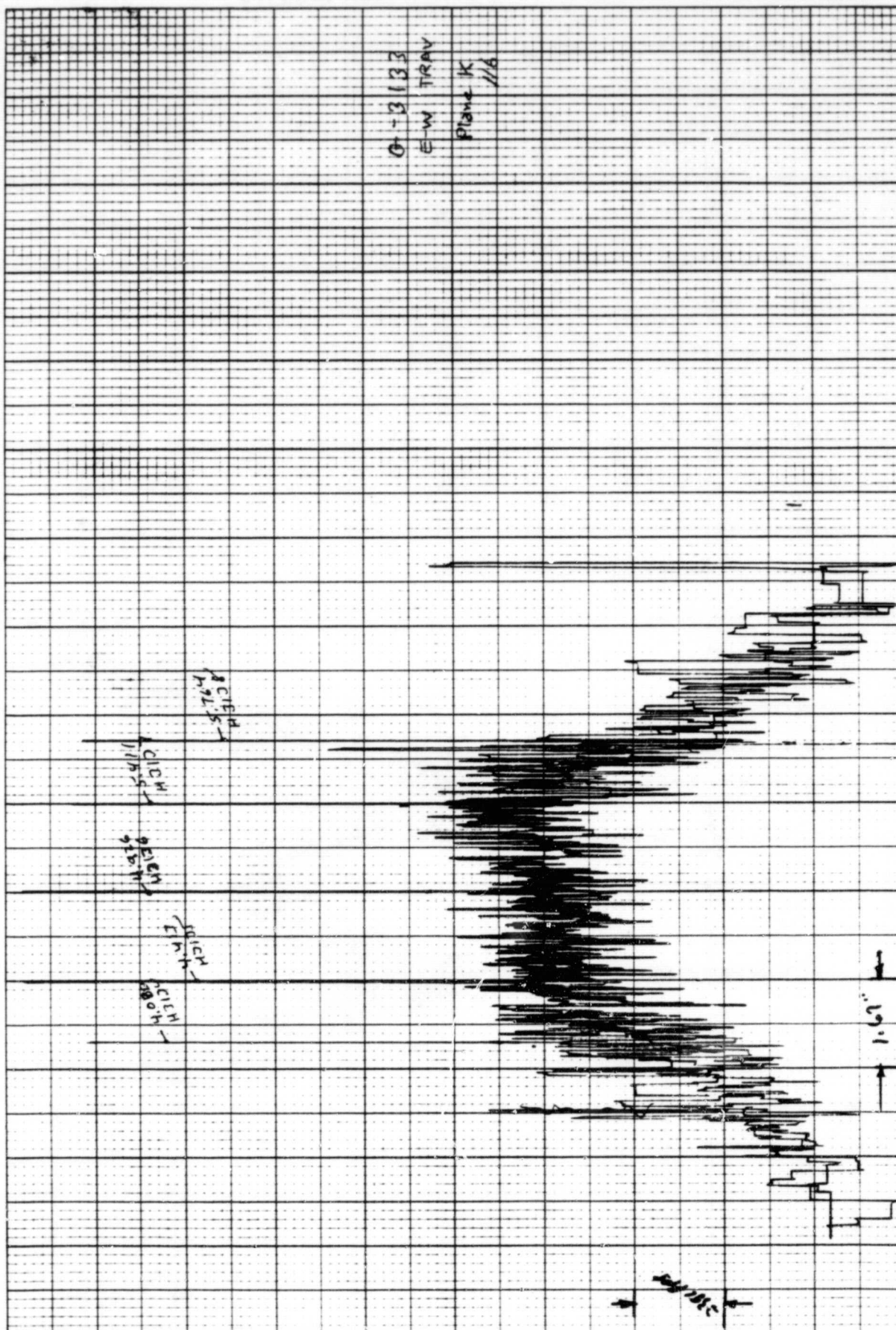


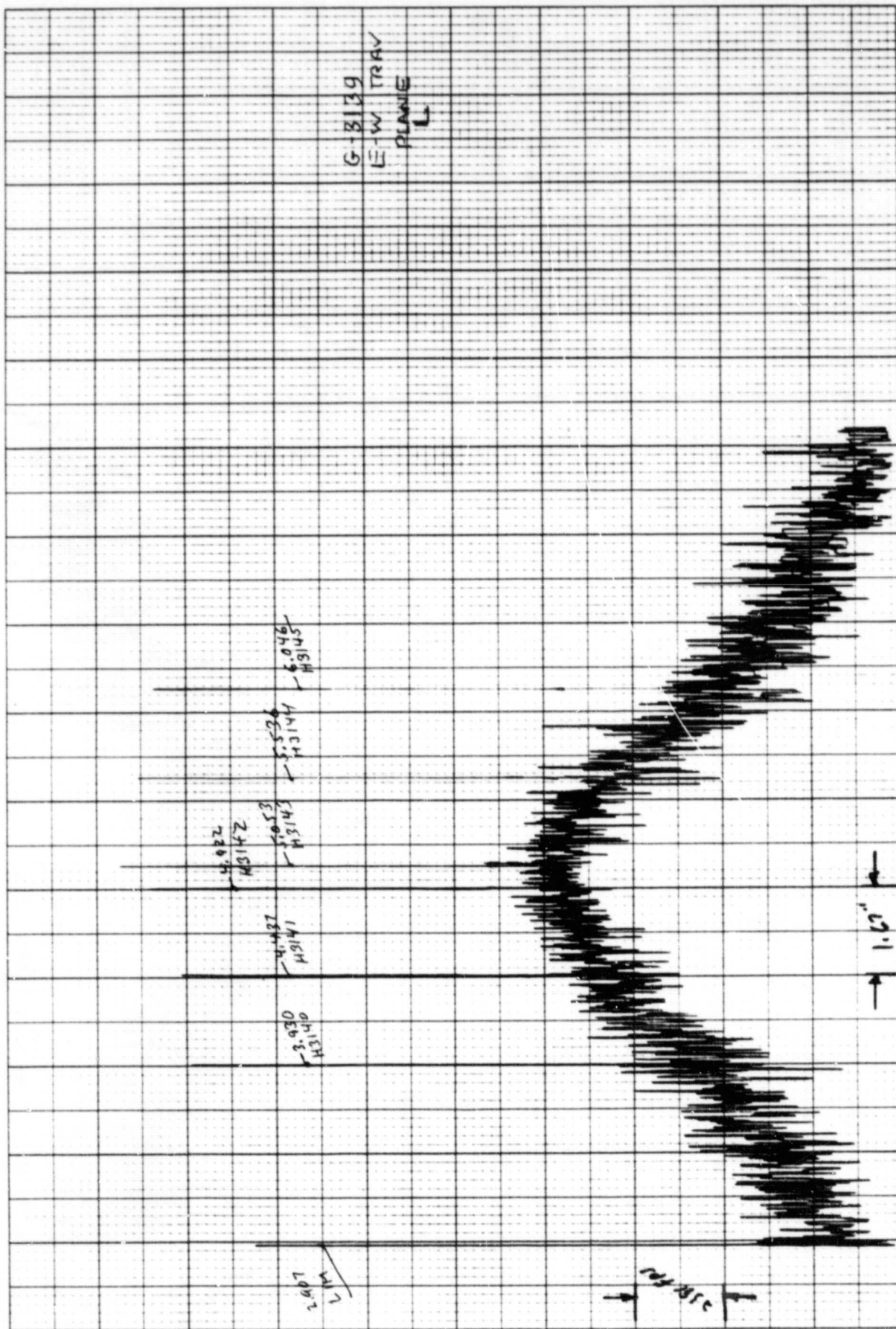


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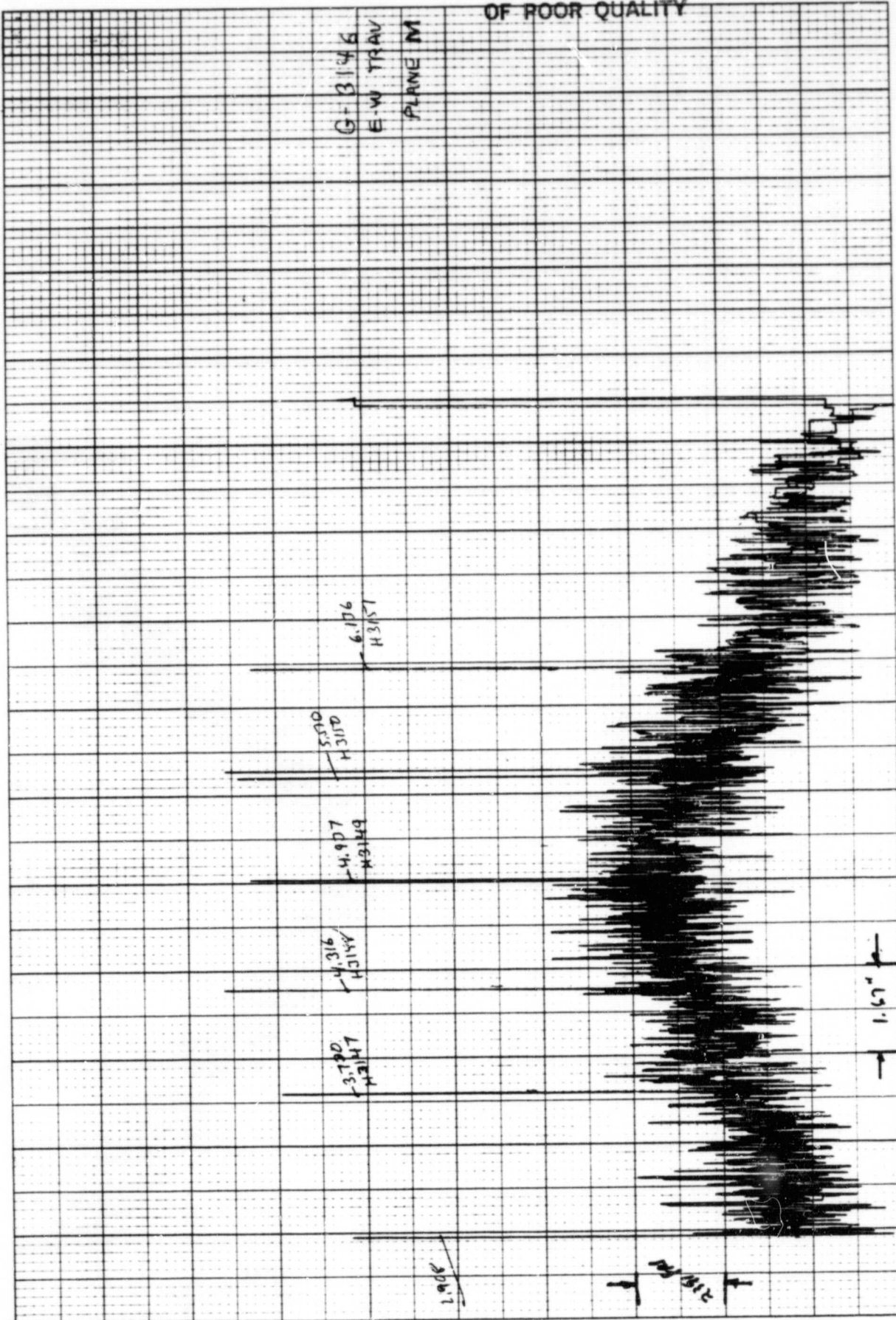
G-3126
E-W Trav
Plane J 1/16



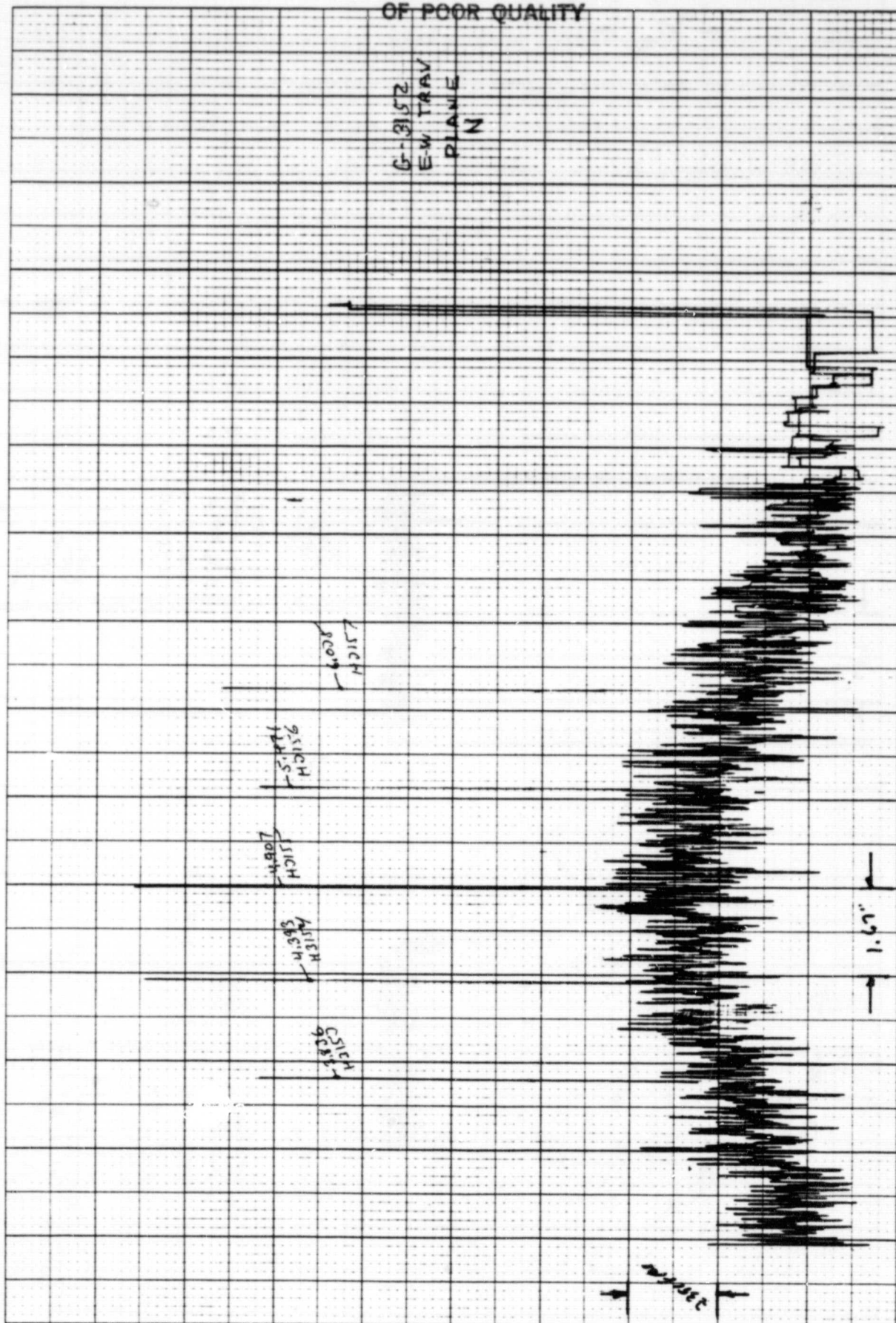


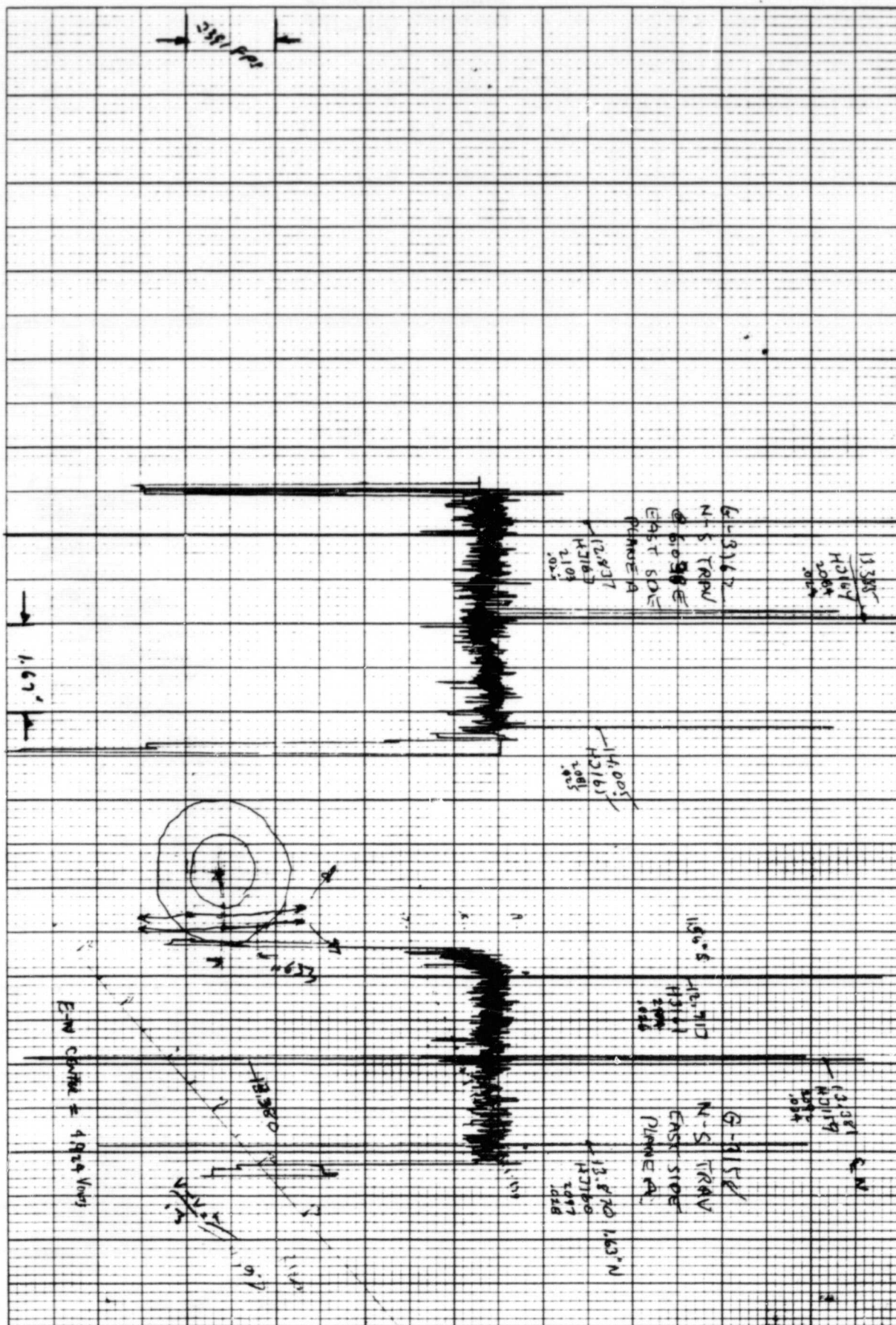


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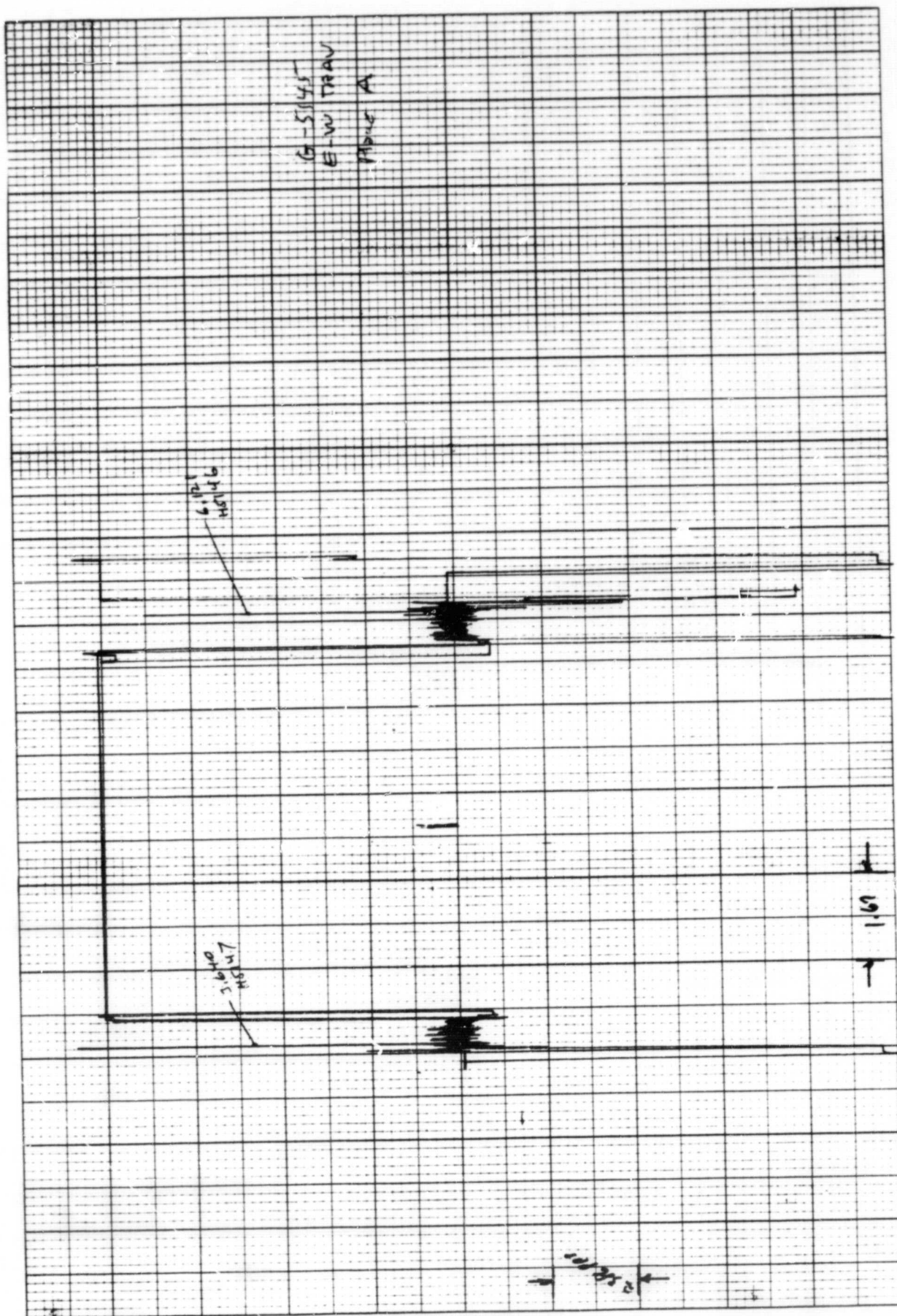


G-3152
E-W TRAV
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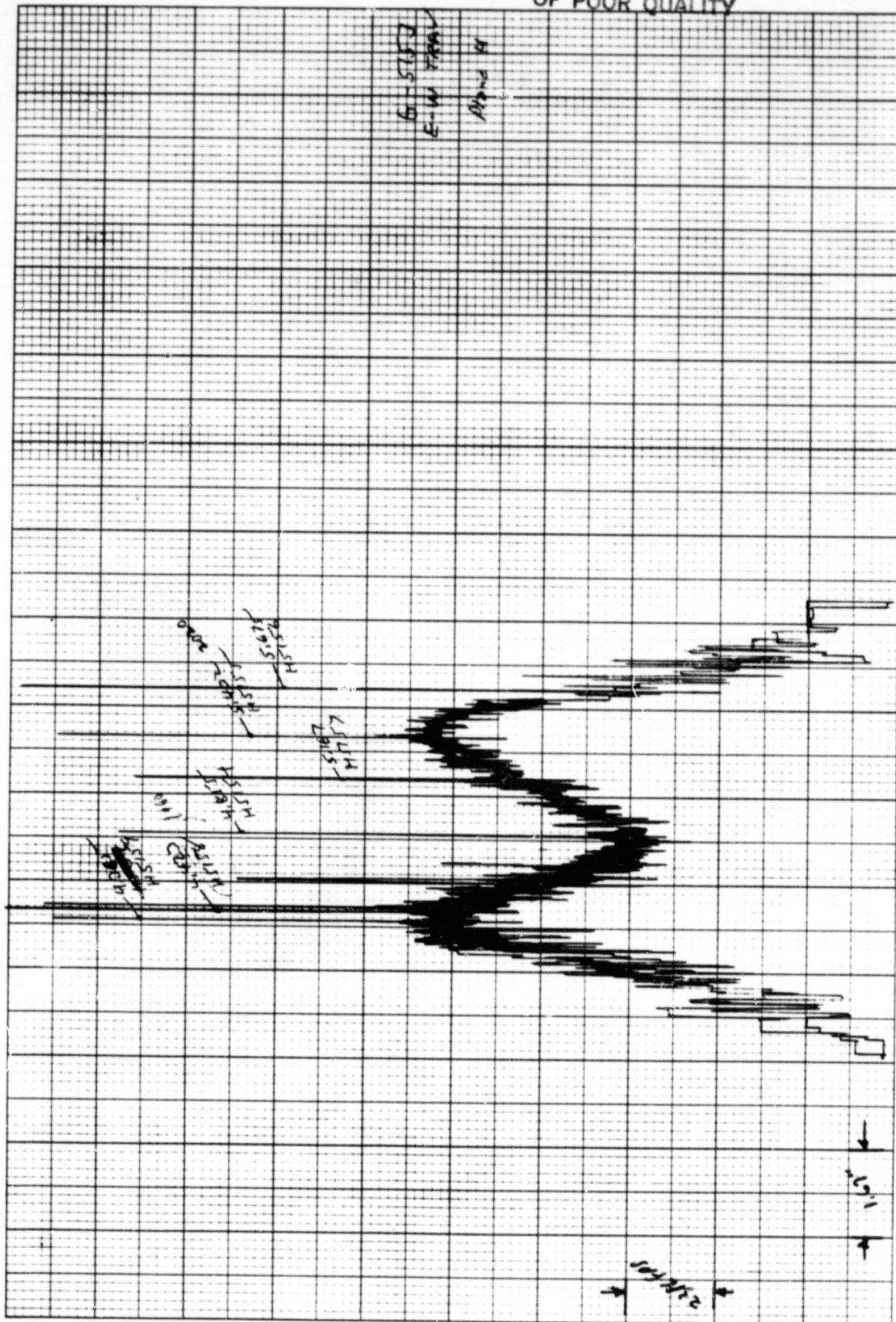
MODEL 1
TEST POINT 119A



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